

1000s of 13,

THE TIMES AND REGISTER.

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EDITED BY WILLIAM F. WAUGH, A.M., M.D.

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\$3.00 in advance.

NEW YORK AND PHILADELPHIA, JULY 6, 1889.

Single Numbers
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ALL CASES OF GENERAL DEBILITY.

By the urgent request of several eminent members of the medical profession, I have added to each wineglassful of this preparation two grains of Soluble Citrate of Iron, and which is designated on the label, "**With Iron, No. 1**," while the same preparation, **Without Iron**, is designated on the label as "**No. 2**."

In prescribing this preparation, physicians should be particular to mention "**COLDEN'S**," viz., "**Ext. Carnis Ft. Comp. (Colden's)**." A Sample of **COLDEN'S BEEF TONIC** will be sent free on application, to any physician (enclosing business card) in the United States. *Sold by druggists generally.*

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GLENN'S SULPHUR SOAP.

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Physicians know the great value of the local use of Sulphur in the Treatment of Diseases of the Skin.

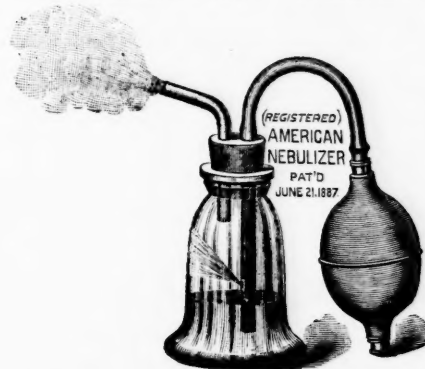
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THE "AMERICAN" NEBULIZER.



Price each \$1.50.

Postage extra, 20 cents.

—SEND FOR CIRCULAR.—

This ingenious little apparatus converts liquid remedies into a nebula or vapor so very fine that it remains suspended in the air like smoke, and can be inhaled and retained within the lungs as readily as the air we breathe, or can be introduced into the nasal passages. Intra-laryngeal applications can be made by allowing the patient to hold his breath while applying nebulized remedies to the Throat and Larynx.

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Notes and Items.

HARPER'S *Magazine* tells of a devout colored clergyman who in his prayer implored the Lord to anoint his congregation with the "ile of Patmos."

AYER'S CHERRY PECTORAL.—

R.—Morphine Sulph. gr. iij.
 Vin. antimon,
 Vin. ipecac, of each ʒ iij.
 Acetum sanguinar ʒ ij.
 Syr. pruni Virg. ʒ iij.—M.

HAIR TONIC.—To prevent the falling out of the hair, Dr. Bordet (*Med. Chirurg. Rundschau*.) gives the following formula:

Take of carbolic acid 30 minims.
 Tincture of nux vomica 2 drachms.
 Comp. tinct. of chincona 1 fluid ounce.
 Tinct. of cantharides 30 minims.
 Cologne water 1 fluid ounce.
 Coconut oil, to make 4 fluid ounces.

Mix. To be applied to the scalp twice a day with a small sponge.—*Meyer's Druggist*.

DYSMENORRHEA.—William Wiles, M.D., Snarebrook, Essex, says: I used Aletris Cordial especially in a case of severe dysmenorrhea of considerable standing. The first period that occurred after taking the Cordial was passed through with considerably less pain than usual. The patient took the medicine for a week before the menstrual period was expected for six months. At the end of that time no difficulty or pain was experienced. So that, considering the time the patient had been suffering before, the benefit was very marked.

A PROFESSIONAL FAILURE.—"Can you recommend something as a spring tonic?" inquired a sallow dyspeptic, stepping listlessly into an aromatic pharmacy. "Yes," replied the druggist, "I have a number of excellent preparations. What is your line of business?" "I am a professional faith-curer."—*Epoch*.

BRINKERHOFF secret remedy for pile injection:

R.—Carbolic acid ʒj.
 Olive oil ʒ ij.
 Zinc chlorida gr. viij.

M.—Sig. Inject from 2 to 8 drops according to the size of the pile.

A GOOD SHAMPOO.—Take of the following:

Fluid extract of quillaya 2 parts.
 Glycerin 1 "
 Cologne water 2 "
 Rose water 7 "
 Alcohol 4 "
 —*Boston Journal of Health*.

WHAT WAYS!—"Mamma!"

"Well, my dear?"

"What awfully queer ways these Western folks do have, don't they? I have been reading an article in the *Stock Breeder's Gazette* that papa brought home, and it says that cows should have their corn fed to them in the ear!"—*Drake's Magazine*.

FOR BURNS.—

R.—Cocain. muriat.,
 Acid. boric āā p. ij.
 Glycerin p. iv.
 Acid carbolic p. i.
 Aquæ distillat p. xxx.

M. Apply on absorbent cotton.

—*Jour. de Pharm. et de Chirurg.*

GONORRHŒA

I have recently published a compact twenty-four page pamphlet on
 "The Treatment of Gonorrhœa and its Sequelæ,"
 by means of Soluble Medicated Bougies, containing many valuable hints for treatment. This will be sent
 FREE on application, together with samples of the Bougies, to any physician who will mention the Times
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FOR NERVOUS PROSTRATION, BRAIN EXHAUSTION,
NEURASTHENIA AND ALL FORMS OF MENTAL
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This WINE OF COCA is so prepared that it contains the active principle of the leaves in a perfectly pure form. Moreover, it is absolutely free from all those foreign substances which all other wines of coca contain, and which interfere, to a great extent, with its curative influence. It is well known that the cocaine contained in the coca leaves varies considerably in its proportion; hence giving to the wines, as ordinarily made, uncertain strength, and causing them to be unreliable in their action on the system. In the RESTORATIVE WINE OF COCA the proportion of alkaloid is invariable and the physician can, therefore, prescribe it with the certainty of obtaining uniform results.

Prof. M. Semmola, M.D., of Italy, says: Having tested and made repeated examinations of the RESTORATIVE WINE OF COCA, I hereby testify that this preparation is most excellent as a restorative in all cases of general debility of the nervous system, especially in disorders arising from excessive intellectual strain or other causes producing mental weakness. I also consider this wine invaluable for the purpose of renewing lost vitality in constitutions enfeebled by prolonged illness, particularly in cases of convalescence from malignant fevers.

Prof. Wm. A. Hammond, M.D., in the course of some interesting remarks before the New York Neurological Society, on Tuesday evening, November 2, called attention to the impurities existing in most of the preparations of wine of coca, which vitiated their value, and he then said:

"Most of the wines of coca contain tannin and extractives, which render the taste of the article astringent, most disagreeable, and even nauseating, especially in cases where the stomach is weak. The difficulty arises from the fact that these wines of coca are made from the leaves, or even from the leavings after the cocaine has been extracted. The active alkaloid, which is the essential element, is therefore wholly lacking in some of these preparations, and this renders them practically worthless.

"I therefore asked a well-known gentleman of this city if he could not prepare a wine of coca which should consist of a good wine and the pure alkaloid. He has succeeded in making such a preparation. It seems almost impossible that there could be any such a substance, for its effects are remarkable.

"A wineglassful of this tonic, taken when one is exhausted and worn out, acts as a most excellent restorative; it gives a feeling of rest and relief, and there is no reaction and no subsequent depression. A general feeling of pleasantness is the result. I have discarded other wines of coca and use this alone. *It is the Health Restorative Co.'s preparation. (Italics ours.)*

"I have found it particularly valuable in cases of dyspepsia and weak stomach. The cocaine appears to have the power to reduce the irritation of the stomach and make it receptive of food. In extreme cases, where

the stomach refuses to take anything, a teaspoonful of the wine may be tried first; the stomach will probably reject it. Another teaspoonful may be given, say fifteen minutes later, and this will possibly share the same fate; but by this time the cocaine in the wine will have so reduced the irritation of the stomach that the third teaspoonful will be retained, or at least the fourth or fifth, and the stomach thus conquered will be in a condition to retain food, which should be given without the wine.

"This wine of coca may be taken by the wineglassful, the same as an ordinary wine; there is no disagreeable taste; in fact, it tastes like a good Burgundy or Port wine. Taken three times a day before meals or whenever needed, it has a remarkably tonic effect, and there is no reaction. The article produces excellent results in cases of depression of spirits; in hysteria, headache, and in nervous troubles generally it works admirably. It is a simple remedy, yet efficacious and remarkable in its results."

FEBRICIDE.

Under the name of FEBRICIDE we offer to the Medical Profession, in the form of pills, **a complete Antipyretic, a Restorative of the highest order, and an Anodine of great Curative Power.**

R.—Each pill contains the one-sixth of a grain of the Hydrochlorate of Cocaine, two grains of the Sulphate of Quinine, and two grains of Acetanilide.

In the dose of one or two pills, three times a day, "Febicide" will be found to be possessed of great curative power in Malarial Affections of any kind, and in all inflammatory diseases of which Fever is an accompaniment. For Neuralgia, Muscular Pains, and Sick Headache, it appears to be almost a specific. Reports received from Physicians of eminence warrant us in recommending "Febicide" in the highest terms to the Medical Faculty.

N. B.—The pills being made *without excipient*, and with only coating sufficient to cover the taste, their solubility is almost instantaneous, and consequently of great advantage where prompt medication is required.

Dr. R. C. McCurdy, of Livermore, Pa.: Have used FEBRICIDE in two cases with *grand results*. In one case of sick headache it acted immediately.

Dr. A. J. Rogers, Juniata, Neb., writes: Your sample of FEBRICIDE had not been in my hands an hour when I was called to see an old lady suffering severely with *Rheumatism and Hyperaesthesia* which was very general, and also with *Asthma*, of which she had suffered for many years. I gave her a pill three times a day until she had taken eighteen. She began to get relief after the fourth pill and continued to improve. By the time she had taken twelve pills, *Rheumatism and Acute Sensitiveness were no more*, and she has not felt anything of them since.

Dr. J. A. Brackett, of Pembroke, Va.: "I have used Febicide in case of childbed fever with remarkable effect, temperature 103°. I had tried other usual remedies without much change; soon after using Febicide the change was like magic."

Dr. C. E. Dupont, of Grahamville, S. C.: "Febicide has proved of great benefit to the patient I tried it on. It was a case of Malarial Toxaemia in an old lady; the attacks had become very irregular and lately had been attended with intercostal neuralgia, which alarmed her exceedingly. The pills acted well and quickly, as heretofore it usually took me ten days, at least, to relieve her of an attack, but this time she was up on the fourth day and wanting to go on a visit."

NATROLITHIC SALT.

Natrolithic Salt is the solid constituent of the Natrolithic Water, and contains: Sulphate of Soda, Carbonate of Soda, Phosphate of Soda, Chloride of Sodium, Sulphate of Lime, Sulphate of Magnesia, and Carbonate of Lithia. *For Habitual Constipation, Rheumatic and Gouty Affections, Biliousness, Corpulence, Dyspepsia, and all Derangements of the Digestive Tract,* it is a wonderful remedy. *Does not gripe after administration.*

DEAR SIR: I postponed writing you regarding the Natrolithic Salts until I had given them a thorough trial. Feeling confident now that they have stood a rigid test, I feel it my duty to inform you as to the results. I have used the Natrolithic Salts in fourteen different cases, and they have fully supported all your claims and even more. In two severe cases of gastro-intestinal catarrh they acted very satisfactorily, not causing the disagreeable nausea and depression which accompanied the use of other laxatives. Their action was admired by my patients and also by myself. In one case of habitual constipation, which seemed to resist all the usual remedies, I gave the Salts, and as usual with gratifying results. As I heretofore stated, I like their effect on the system. They are pleasant to take. There is no nausea or depression; no languor or loss of appetite when their action is completed. In cases of exhausted vitality, where constipation exists, I have also tried them with the same good results. In removing indigestible food from the alimentary canal—a common complaint during the hot weather—I prescribe them daily, the action on the bowels being quick and the relief correspondingly prompt.

I trust the profession will give them a trial, feeling confident that they will be well pleased with the results obtained. Yours respectfully,
ELIAS E. WILDMAN, M.D.

A Sample Bottle or Box of either remedy will be sent free of charge to any Physician who may wish to examine the same.

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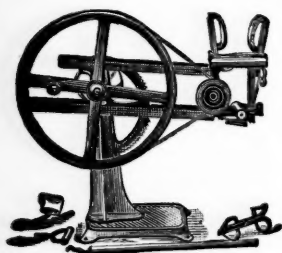
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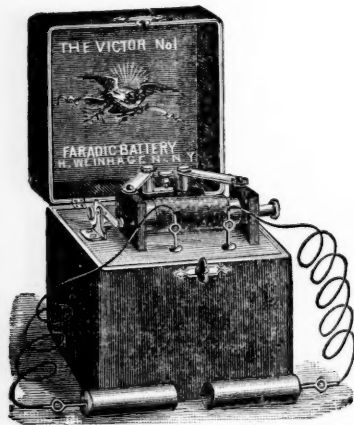
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These Thermometers will not change their readings with age nor lose their index.



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Very respectfully,

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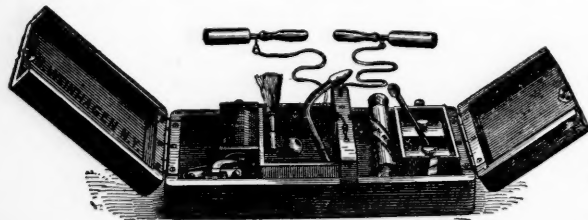
YALE COLLEGE OBSERVATORY, NEW HAVEN, Conn. Nov. 12, 1887.

MR. H. WEINHAGEN: Yours of the 9th inst. duly received. With the small corrections you have attained in recent shipments, I should think you would find it profitable to have all your best Clinical Thermometers certified.

Very respectfully,

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FIFTH.—The Company gives to the Eastern public the opportunity of seeing the various products raised in the very localities where it makes its loans. It had on exhibition at the American Institute of New York City from October 3d to December 15, 1888, a beautiful assortment of Kansas and Nebraska grain, fruit, and grasses. Part of the Exhibit was the display made by Custer County at the Nebraska State Fair, for which a prize of \$100 was awarded.

These products can be seen at the New York Office of the Company, and are well worth an examination.

The Highest Reward of Superiority was given to the Company by the American Institute for this exhibit.

SIXTH.—The Company publishes every month a Bulletin giving full information about the amount, security, improvement, location, distance from railroad, etc., etc., of every loan offered for sale.

Further information in regard to any of the above points will be gladly furnished on application.

ADDRESS FOR MONTHLY BULLETIN AND INVESTERS COMMITTEE REPORT FOR 1888,

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191 BROADWAY, NEW YORK.

(Please mention The Times and Register.)

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R. H. CHITTENDEN,
Professor of Physiological Chemistry in Yale College.

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MALTINE with Cascara Sagrada.
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Physicians may obtain Maltine from all druggists in every part of the world. In cases where the physician intends to prescribe Maltine, the word "Maltine" should be written, and not simply the words "Malt Extract" or "Extract of Malt."

Send for Pamphlet giving comparative analysis by 100 of the best Analytical Chemists in this country and Europe.

We will be happy to supply any regular practitioner with eight ounces each of any three Maltine compounds that may be selected from our list, providing he will agree to pay express charges on same.

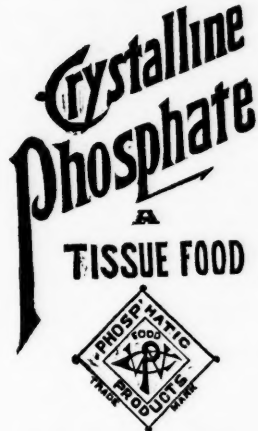
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A Peerless Chemico-Physiological Food and Restorative



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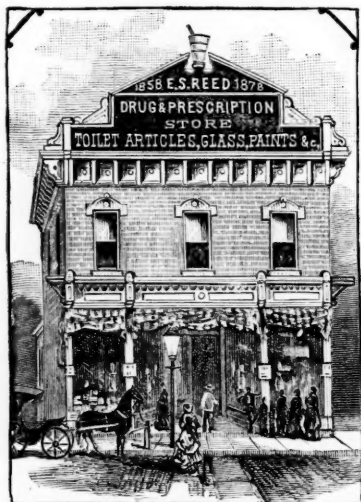
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Philadelphia Medical Times.
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NEW YORK AND PHILADELPHIA, JULY 6, 1889.

The Medical Register.
Vol. VI, No. 131.

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SODIUM SILICO-FLUORIDE.

(Prize Thesis, presented to the Medico-Chirurgical College of Philadelphia, 1889.)

By JOHN W. CROSKY, M.D.,
PHILADELPHIA.

SODIUM SILICO-FLUORIDE was introduced to the medical profession in this country by Mr. Frank Rosengarten of the firm of Messrs. Rosengarten & Sons, his attention having been called to this drug by the experiments of Mr. William Thomson, F.B.S.C., F.C.S., of the Royal Institution, Manchester, England, he having experimented with a number of chemicals to demonstrate their antiseptic properties.

The ones he found possessing the most remarkable antiseptic properties were the compounds of fluorine, hydro-fluoric acid and the acid and neutral fluorides of sodium, potassium and ammonium, and the fluosilicates of these bases. Of the compounds, he found fluosilicate of sodium the one which, for the general purposes of an antiseptic, was perhaps the best suited.

He claims that this salt is not poisonous, has no smell, and is sparingly soluble in water. Having obtained some of this salt from Messrs. Rosengarten & Sons, I found upon examination that it is a fine, white powder, of slightly saline acid taste, perfectly inodorous, seven grains of the salt dissolving in each fluidounce of water.

To test the solubility, thirty grains of the salt were taken and added to two fluid-ounces of distilled water, the temperature of which was 64° F. After shaking for five minutes, which raised the temperature of the water 2°, I emptied the solution upon a piece of filter-paper, the weight of which was twenty-three grains. After all the solution had passed through the filter, I evaporated the residue to dryness. I then set the paper and powder aside, so that it might resume its normal hygroscopic condition. Upon weighing the filter and residuum, I found the combined weight to be thirty-nine grains. Deducting the weight of the filter, twenty-three grains, left of the salt remaining undissolved, sixteen grains. As I originally had thirty grains, the two ounces of water appear to have absorbed fourteen grains, or seven grains of the salt to each fluid-ounce of distilled water, at a temperature of 64° F. In this experiment only one-half drachm of the original water was lost by evaporation. So, I think it is safe to say that the solubility of sodium silico-fluoride is seven grains to the fluid-ounce of distilled water, or 1.4 per cent. To ascertain if the salt would be more soluble at a higher temperature, the above experiment was repeated, heating the solution to the boiling-point, 212° F. The solution was then allowed to cool to a temperature of 64° F., and was then placed upon a piece of filter-paper weighing twenty grains. After allowing the solution to pass through the filter, after being dried it was again weighed and found to weigh thirty-

two grains. Taking the weight of the filter, at twenty grains, I would have undissolved twelve grains of the salt. This would make the amount taken up by the two ounces of water, at a temperature of 212° F., eighteen grains, or nine grains to the ounce. This solution did not remain clear like the former for in about four hours' time it threw down a flocculent white precipitate. These solutions gave me an acid reaction to blue litmus paper; but while giving an acid reaction, it could not be considered chemically an acid salt, the composition being Na_2SiF_6 .

Sodium silico-fluoride is formed by the simultaneous production of hydro-fluoric acid and hydro-silicic acid. A mixture of sand and fluor spar is treated with concentrated sulphuric acid in a suitable vessel, whereupon the acid combines with the bases with which the alloys are combined, forming sulphates and silicic acid in the form of gas. This gas is passed into a vessel containing water. As the saturation is complete, and after standing the precipitate has settled, the clear supernatant solution is decanted into another vessel. After assaying to determine the quantity of hydro-fluosilicic acid in solution, the chemical equivalent of soda bicarbonate in solution is added, when a copious precipitate of sodium silico-fluoride ensues. If an effort be made to neutralize, by adding soda bicarbonate till litmus paper turns blue, the equivalent of silica would be thrown out of the combination and a salt result that would not be the one sought for.

To test its antiseptic properties, I performed the following experiments: (a) Animal infusion. (b) Vegetable infusion.

(a) Chopping into fine pieces some fresh beef that had been slaughtered two days previously, I placed an equal portion in two vessels and covered the same with two fluid-ounces of water. To one I added one grain of the sodium silico-fluoride. In eight days' time the plain infusion showed signs of putrefaction, and bacteria could be demonstrated in large numbers. The infusion containing the sodium silico-fluoride remained perfectly sweet and without odor for a period of three weeks, and at that time no bacteria could be demonstrated.

(b) I took some ordinary timothy hay, chopped it into small pieces, and boiled it with some distilled water in a flask for fifteen minutes. I then filtered it and set it aside, in two test-tubes, in a warm place. Into one I dropped one grain of the sodium silico-fluoride, which made a solution equivalent to one part sodium silico-fluoride in one thousand parts of water. In three days' time the plain liquid was swarming with bacilli. After allowing the other tube to stand for one month no sign of life or of putrefaction could be demonstrated.

To test the pharmacological action of sodium silico-fluoride the following experiments were performed:

1. Two rabbits of about equal size and weight were obtained. To one whose weight was thirty ounces, eight and one-half grains of sodium silico-fluoride, enclosed in a gelatin capsule, was given *via* the gastro-intestinal route; at ten minutes after 11 o'clock A.M., January 6, 1889. Both rabbits were allowed to run around the room so that their actions

could be compared. Twenty minutes after the administration of the salt, the rabbit became quiet, lying at full length on the floor, showing no inclination to move. 11.35 A.M. Still lying full length, decidedly unwilling to be disturbed; respirations hurried and about 125 per minute; eye reflexes prompt; ear reflexes prompt; anterior skin reflexes prompt; posterior reflexes diminished. 11.40 A.M. Respirations still more hurried, 160 per minute; when aroused decidedly weak in posterior extremities. 11.50. Becoming restless; respirations about the same. 12 M. Seems to have regained its strength, running about as the other rabbit. 12.40 P.M. Beginning again to show signs of weakness; hard to arouse. 12.50 P.M. Sensation posteriorly diminished. 1 P.M. Lying at full length; posterior reflexes entirely abolished; ear reflexes abolished; impossible to make rabbit move by poking. 1.10 P.M. Rabbit falls upon its side violently trembling; spasmodic contractions of the posterior extremities; respiration very slow. 1.12 P.M. Spasmodic contraction of anterior extremities. 1.13 P.M. General convulsions with collapse; all reflexes abolished; respiration hardly perceptible. 1.16 P.M. Respirations apparently cease; relaxation of all the muscles, with relaxation of vesical sphincter, and a voiding of a small quantity of urine; only sign of life was a slight trembling in the carotid region; pupils dilated. 1.20 P.M. Opened thorax; heart beating 80 per minute. 1.23 P.M. Opened thorax; heart beating 68 per minute. 1.26 P.M. Opened thorax; heart being 52 per minute. 1.30 P.M. Opened thorax; heart beating 40 per minute. 1.44 P.M. Opened thorax; heart beating 32 per minute. 1.50 P.M. Rigor mortis. 1.55 P.M. Heart beating 24 per minute. 2 P.M. Heart beating 10 per minute. 2.05 P.M. Heart beating 3 per minute. 2.06 P.M. Heart ceased beating.

Upon necroscopical examination the heart was found arrested in strong systole; the right auricle was full of blood, with no clotting; the ventricles were entirely bloodless, having been squeezed perfectly dry by the strong systole; the lungs were found to be slightly injected and entirely collapsed; the stomach was greatly distended with food, although the rabbit had not been fed for twelve hours previous to the experiment; the mucous coat readily peeled off in large pieces, leaving the muscular tissue entirely bare; the large intestines were distended; the abdominal aorta was full of dark fluid blood; the kidneys were pale and bloodless; the bladder was empty.

2. Administered hypodermically into the posterior lymph spaces of a frog, fifteen minims of a 6 per cent. solution of sodium silico-fluoride at 8.30 P.M. This seemed to make little or no impression, excepting to hurry the respirations. At 10.15 P.M., again administered fifteen minims of the same solution; again had hurried respirations. 11.05 P.M. Showed motor paralysis of anterior extremities; pinching of anterior extremities caused contraction of the posterior extremities. Placed again upon its abdomen, it draws up its posterior extremities, but has no control of the anterior. The superficial veins in posterior extremities appear very much distended, the web show-

ing marked congestion; eye reflexes very sluggish. 11.40 P.M., showed marked paralysis of entire body; no movements perceptible except those of respiration. 11.57 P.M. Respirations very slow. 12.01 A.M. Respirations apparently cease. 2 A.M. Heart still beating.

3. In order to demonstrate if the salt had any action on the reflex functions of the spinal cord, the method of Türk was employed. Its principle consists in comparative measurements of the time required, before and after poisoning, for a given stimulus to the skin to evoke a reflex muscular contraction in a frog, from which the cerebral hemispheres have been removed. To accomplish this, a frog was taken, and an incision made through the occipito-atlantal membrane, thus exposing the medulla oblongata. This portion of the cord was divided, and the brain destroyed with a needle. After the spinal ganglia had regained their tone, indicated by the frog assuming the normal position, it was suspended by a hook passing through its nose. A test liquid was then made of a very weak aqueous solution of sulphuric acid. This solution was brought under the frog, just so the tip of his toes entered the liquid, and the length of time required before the frog withdrew its foot was determined by counting the beats of a metronome. As soon as the reflex movement occurred the frog was immersed in some fresh water, to remove the excess of acid and prevent corrosion of the skin. The metronome was set at sixty beats to the minute.

8.45 P.M.	Withdrew at	four	beats of metronome.
8.47 "	"	five	"
8.50 "	"	"	"
8.53 "	"	"	"
8.55 "	"	"	"
8.58 "	"	"	"
9.01 "	"	"	"

Injected fifteen minims of a 6 per cent. solution of sodium silico-fluoride.

9.04 P.M.	Withdrew at	five	beats of metronome.
9.07 "	"	"	"
9.10 "	"	four	"
9.13 "	"	"	"
9.17 "	"	"	"
9.22 "	"	"	"
9.28 "	"	five	"
9.31 "	"	seven	"
9.34 "	"	"	"
9.37 "	"	eight	"
9.40 "	"	nine	"
9.43 "	"	seven	"
9.46 "	"	eight	"
9.49 "	"	"	"
9.52 "	"	"	"
9.55 "	"	"	"
9.58 "	"	"	"
10.01 "	"	nine	"
10.07 "	"	ten	"
10.10 "	"	eleven	"
10.13 "	"	fourteen	"
10.16 "	"	sixteen	"
10.22 "	"	sevent'n	"
10.25 "	"	nineteen	"

10.28 P.M. Withdrew at twenty beats of metronome.

10.31 " " " 24 " " "

10.34 " No reflex action. Very hard pinching of posterior extremities caused reflex in the anterior extremities. No reflex action to actual flame.

4. A frog was taken, and after the femoral artery in the left leg was ligated thirty minims of a 6 per cent. solution were injected into the posterior lymph sacs at 9 P.M. 9.30 P.M. The recti abdominis were very stiff and hard, and gave no response to electrical stimuli. 9.15 P.M. Both posterior extremities respond to electrical stimuli. 9.21 P.M. Both respond. 9.26 P.M. Muscular trembling of right leg. 9.33 P.M. Stimulation of nerve equally prompt; reflex stimulation almost abolished in right posterior extremity.

5. 9.20 P.M. Immersed some fresh muscle in a 6 per cent. solution, and the blood coagulates at once. 9.21 P.M. Prompt response to electrical stimuli. 9.30 P.M. Prompt response to electrical stimuli. 9.50 P.M. No response to electrical stimuli. Muscle very hard and white.

6. Took a frog's heart, beating twenty-eight to the minute, and immersed it in a 6 per cent. solution. The first half minute the heart made ten beats, then stopped for one minute, after which it gradually diminished in force, stopping in systole.

7. Took some egg albumen and dropped it into a 6 per cent. solution of sodium silico-fluoride, and it immediately coagulated.

These experiments were repeated a sufficient number of times to guarantee the accuracy of the observations. Lack of laboratory facilities prevented the making of more extended pharmacological investigations. My attempt to determine the action of sodium silico-fluoride on blood pressure failed, for want of instruments to properly indicate the result of the administration of the drug. However, the foregoing experiments give us an idea of the general action of the drug, and indicate the probable paths of this action. Sodium silico-fluoride administered to either warm- or cold-blooded animals, as has been demonstrated, exhibits its action by marked stimulation of respiration. This stimulation passes gradually into paralysis of the respiratory function. Now, in case of paralysis, it is readily determined whether the case is peripheral or central. In experiment No. 4, it has been demonstrated that both muscle and nerve retain their power of transmitting the electrical stimuli. This at once excludes the probability of the drug acting through the terminal filaments of the respiratory nerves. Moreover, if convulsions are produced their nature also will give a clear general idea as to their origin. As convulsions of central origin throw the entire, muscles or entire groups of muscles, into coördinated contraction, so, on the other hand, convulsions originating in the nerves, or in the intra-muscular fibers, at different muscular fibres, at different times, and with different degrees of vigor, produce the so-called fibrillar contractions. The above experiments show that convulsions are a marked symptom of poisoning by sodium silico-fluoride, and also show that these convulsions are general, rather than fibrillar or local, thus indicating that the action of the poison is upon

the central rather than upon the peripheral nervous system.

These experiments also show that sodium silico-fluoride causes a condition closely allied to that known as rigor mortis, by an ultimate direct action on the muscular tissues. As the drug coagulates albumen even in weak solutions, quickly causing coagula to form in warm blood, it also probably coagulates myosin in the muscular tissues. These experiments also show that the automatic functions generally ascribed to the medulla oblongata, regulation of the heart, and vaso-motor tonus, and pupil mechanism are seriously disturbed. The venous system is greatly dilated, the heart beating after cessation of respiration, and the pupils are dilated at the moment of death.

In regard to reflex action, the experiments showing no loss of the power of coördination, that both the muscle and nerve retain their power of transmitting electrical stimuli, and, finally, that the spinal cord itself retains this power, we can conclude that the loss of reflex action after the administration of sodium silico-fluoride is probably due to paralysis of Setschenow's center. Finally, in regard to the action on the circulation, these experiments indicate that sodium silico-fluoride first increases the heart's action by stimulation of the vaso-motor centers, and finally lowers and destroys the heart's action by a direct influence on the heart's contained ganglia.

CLINICAL EXPERIMENTS WITH SODIUM SILICO-FLUORIDE IN THE CLINIC OF PROF. GOODMAN.

CASE I.—Ralph M., admitted to the hospital March 28, 1888. The patient was eight years old, born in Chester, Pa. The case presented the following interesting features: The anterior wall of the bladder was entirely wanting, and the posterior wall protruded like a hernia through a somewhat circular opening in the abdomen, just above the pubic arch. There was an absence of the umbilical cicatrix. The mucous surface exposed measured three-quarters of an inch, and was of a pale-red color, with brighter spots upon the surface. The right ureter was normal, the left appeared to be hypertrophied. The pubic bones were not entirely ossified, being fibrous for about an inch on each side of the symphysis pubis. There was only a very rudimentary penis, showing the partially formed urethra upon the dorsal surface. The scrotum was not developed. The testes appeared normal and were located under the skin on the inner side of each thigh. Their presence could be demonstrated by the cremaster reflex. There was also an oblique inguinal hernia of the right side. When admitted there was much excoriation of the surrounding parts, caused by the constant dribbling of the urine. These parts were washed frequently with a 1 to 1000 solution of the sodium silico-fluoride and the urine collected upon absorbent cotton. Various devices were suggested and tried to remedy the deformity. All these devices having failed, it was thought best to attempt the formation of an artificial bladder, by turning down a flap of skin, brought from the abdomen, and covering the same with flaps from the inguinal region. The patient being anaesthetised, an incision was

carried from Poupart's ligament through the skin and superficial fascia, one and one-quarter inches from the median line to about nine inches up the abdomen on each side, and united at the top by a curved incision. The upper part was dissected down for four and one-half inches, being two and one-half inches in width. The edges of the flap were carefully stitched with catgut to the edges of the lower part, and the raw surface covered by flaps brought from the groin on either side. A drainage-tube was inserted into the newly formed bladder, a subsequent operation being necessary to form a urethra and modify the penis. In dissecting and handling the flaps, great care was exercised, and a solution of sodium silico-fluoride, one to one thousand, was constantly used during the operation. The patient was bandaged in a sitting posture with thighs well flexed. He rallied and the prospects were good for a recovery, but in about twenty-four hours suppression of the urine set in, and about thirty-six hours after this event he succumbed to uræmia. At the time of his death the wound was examined and it was found that primary union had taken place.

CASE II. *Amputation at lower third of Forearm, for Epithelioma of Dorsal Surface of Hand.*—Joseph L., aged fifty-three. He first noticed a small sore spot appear nine years previously, and did everything anybody told him, but the sore did not improve, and finally reached a large size, as shown by the accompanying photograph. He was admitted into the hospital, and the day previous to operation the arm was washed, shaved, and dressed with gauze wet with the sodium silico-fluoride, one to one thousand. The day following, the arm was amputated, making an antero-posterior flap with a circular of the muscles. The bones were at first sawn about half an inch longer than necessary, after which the periosteum was split and stripped from the bones. The bones were again sawn and the periosteum united with catgut ligature, and a small bundle of fine catgut was introduced for drainage. During the operation the arm was kept sprayed with a one to one thousand solution of sodium silico-fluoride. The arm was dressed with iodoform and the bandages were not removed for one week. At the end of that time complete union had taken place, and the patient was allowed to depart for his home the day following. Since that time the patient has been seen twice, and he reports that within one month after the operation he was in his fields ploughing with the lines hung over his stump.

CASE III.—In a case of gonorrhœa, which the patient claimed was his first attack, injections of sodium silico-fluoride, half a grain to the ounce of water, were used, and upon the fourth day of the treatment the patient showed no signs of any discharge.

In cases of conjunctivitis and conjunctivitis neonatorum, a one to one thousand solution works very nicely, affecting a cure in a few days.

Dr. Ziegler, resident physician at the Wills' Eye Hospital, reports that after cataract operations the continued use of sodium silico-fluoride did not answer very well, as in very nearly every case it set up a slight amount of conjunctivitis.

As a solution in which to keep instruments during an operation it does not answer very well, owing to the fact that the instruments are tarnished and spotted, no doubt from the effect of oxidation. This action can be diminished by adding sodium bicarbonate to the solution in quantities sufficient to render the solution strongly alkaline.

Since writing the foregoing, I have received a communication from Mr. William Thomson, of Manchester, and he was also kind enough to send me a sample of sodium silico-fluoride, which salt he has had registered under the name of salufer (probably from the two Latin words *salus* and *fero*, meaning safety bearer). Quoting from his letter received as above, he says: "In reply to your favor of the 24th ultimo, I don't know whether the preparation you have is perfectly satisfactory. The hydro-fluoric should be carefully combined with silica, and the resulting compound carefully neutralized with soda. If this is not done, the salt is liable to prove fatal to rabbits or guinea-pigs in large doses, much more so than if not so prepared. In human beings vomiting would be produced at once. A solution of salufer (sodium silico-fluoride), same as sample sent, does not coagulate albumen. It is probable that Rosengarten & Son's sample may not be prepared, as it is only possible to dissolve 2.68 grains of that salt in one ounce of water. The formula is Na_2SiF_6 ."

After a careful analysis, I found that the sample of salufer received from Mr. William Thomson contains 98.9 per cent. sodium silico-fluoride (Na_2SiF_6); 1.1 per cent. free silicic acid. It has an acid reaction to litmus paper. The aqueous solution coagulates egg albumen to a small extent, but not less than the American sodium silico-fluoride experimented with. In this attribute the two preparations are exactly alike. One part of salufer dissolves at 50°F . in one hundred and fifty parts of water, except the 1.1 per cent. of silicic acid, and in this attribute is similar to the American, the latter being, however, completely soluble and free from silicic acid.

Salufer contains 24.2 per cent. of sodium, Rosengarten & Son's sodium silico-fluoride contains 24.4 per cent., and Na_2SiF_6 contains, theoretically, 24.5 per cent.

The acid reaction in salufer is destroyed by the addition of carbonate of sodium in excess, as follows: $\text{Na}_2\text{SiF}_6 + 3\text{Na}_2\text{SiO}_3 + 3\text{CO}_2 + \text{NaSiO}_3 + 6\text{NaF}$, and in this reaction it acts precisely the same as the silico-fluoride of sodium of Messrs. Rosengarten & Sons.

No further chemical or physiological difference than the 1.1 per cent. of free silicic acid in the salufer was found in the two preparations, and this 1.1 per cent. is an impurity of no medical use.

We may sum up in conclusion that sodium silico-fluoride is:

1. An efficient antiseptic.
2. That a solution of one grain to an ounce of water is quite strong enough for ordinary purposes; in that strength being apparently unirritating.
3. That the solution is unirritating to the hands, which is no small advantage to those operators whose fingers are easily irritated by ordinary antiseptic solutions.

4. That a solution of one grain to the ounce may safely be used to syringe out closed cavities, even where the operator cannot be certain of all the fluid returning.

5. That it acts very efficiently as a deodorizer of the hands, after examining carcinoma of the uterus or rectum, by steeping the hands in a saturated solution. The odor is removed more efficiently than it is by any solution with which I am acquainted.

6. That a very convenient and comfortable antiseptic poultice may be made by soaking gauze or absorbent wool in a hot solution (ten grains to the pint), wringing it freely of excessive moisture, applying it to the wound and covering with gutta percha tissue.

Note taken from the British Medical Journal, May 19, 1889. Mr. A. W. Mays Robson, F.R.C.S., Honorary Surgeon Leeds General Infirmary, and Lecturer on Practical Surgery at the Yorkshire College:

"It is chiefly to find a safe and efficient antiseptic that I have, during the past few months, been using salufer almost exclusively in my surgical work. Before describing details of critical cases which incontrovertibly try the value of any antiseptic, it might be well to mention a few of the uses to which I have put salufer, and unless otherwise stated, a solution of twenty grains to the pint of water is always understood, which proportion seems to be at the same time unirritating and efficiently antiseptic. They are as follows:

"In washing out the peritoneal cavity after laparotomy, here using ten grains to the pint; in the case of strangulated hernia; in the radical cure of hernia; in excision of joints; in amputations of the arm, leg, or thigh; in washing out the pleural cavity in the removal of tumors; in excision of veins; in ligation of bloodvessels in compound fractures; in osteotomies; in washing out the bladder; in washing out the uterus after curetting the interior; and after the removal of septic retained membranes; as a vaginal douche before and after Apostoli's operation for fibroid; in the irrigation of extensive ulceration in the rectum, where a poisonous antiseptic could not be used; in washing out the stomach; as an injection in gonorrhoea; in syringing out large pelvic abscesses; as a gargle in hospital and in diphtheritic sore throat; as a nasal douche after removing polypi; for syringing out empyema of antrum, and in many other cases."

"Salufer (sodium silico-fluoride) appears to have a highly solvent effect on exposed dentine, and cannot be used as a devitalizer, being irritant and not caustic in its effects. In pulpless molars, where there is a mass of dentine to be removed, it can be safely used, if sealed in the cavity for two days before excavating. After extracting it assists in the arrest of bleeding, and used afterwards as a mouth wash has a hardening effect on the gums.

"After the removal of tartar and the sulphate of copper treatment for pyorrhoea alveolaris, a single daily application of the powder has kept the gums healthy."

¹ Taken from the Transactions of the Odontological Society of Great Britain, Vol. XX, No. 2, page 92.

REPORT ON CASES OF THE ALEXANDER OPERATION.

(Read before the Ohio State Medical Society, May 23, 1889.)

BY D. TOD GILLIAM, M.D.,

Professor of Obstetrics and Diseases of Women, Starling Medical College, Columbus, Ohio.

IT is not the purpose of this paper to discuss the Alexander operation, either to advocate or deny it, nor yet to marshal an array of cases to swell the statistics, but simply and briefly to report a few cases, the chief interest of which lies in the fact that ultimate good followed in several such as were stamped as failures at the time of operation. I may here say, that in all cases operated on the ligaments were found, but in many there was a marked disparity in size and strength on opposite sides.

The operative failures were due to rupture of ligaments, either by inherent fragility or because of the inordinate force necessary to overcome the adhesions. In a certain proportion of cases the breaking of ligaments is not to be obviated, and, therefore, this is to be classed as one of the unavoidable accidents of the operation. Neither can the accident be foreseen nor guarded against, as it occurs in patients of every type of constitution and every phase of physical condition. This, it must be admitted, constitutes a serious drawback to the operation, and if (as in my own experience), several cases occur in succession, is calculated to discourage the operator. Should such a number of misfortunes attend the early efforts of an operator, it is easy to see how it might lead to the abandonment of the operation. Munde, than whom, probably, no man in this country has had a larger experience in this line, writes me that his experience coincides with mine in this particular, and while he deprecates the unavoidable nature of the difficulty, reaffirms his faith in the operation as expressed in his writings.

It is hardly necessary at this day to describe the operation *in extenso*, but inasmuch as many of the text-books make no allusion to it, a brief description may not be amiss. As a preliminary, it is absolutely essential that all adhesions be broken up and the uterus be placed in the normal position. It is a good plan to hold it so during the operation by a well-adjusted pessary, especially in the absence of a trained assistant, as this obviates the necessity of introducing the fingers into the vagina during the act of operating. The patient being laid flat on the table, and the pubis shaved, the operator takes his position on the side opposite to that to be operated on. First, locate with the finger the spine of the pubis, and cut boldly down on it, extending the incision one and a half to two inches in the direction of the anterior superior spinous process of the ileum. In this way the external ring of the inguinal canal is reached, and a knuckle of fat protrudes. This being carefully divested of its investing membrane is seized with broad tissue forceps and lifted up, when it is grasped by the thumb and forefinger of the left hand. By spreading it over the end of the finger the ligament is recognized. It is now separated and drawn out, the redundant fat cleared away, the hemorrhage staunches, and the wound thoroughly

cleansed by antiseptic irrigation. The ligament is now stretched to the pillars of the external ring, preferably by silkworm gut suture, the frayed ends cut off, and the remainder tucked away in the wound. A drainage-tube is introduced into the canal, extending outward along the bottom of the wound, and the latter is then closed by interrupted silk sutures. A fold of iodoform gauze, held in place by adhesive strips, completes the dressing. The patient is put to bed with the knees flexed. In all, these two precautions are always observed: First, to abstain from any act or manœuvre by which the knuckle of fat will be disturbed in its relations or pushed back into the canal, and, second, to preserve the moorings of the ligament at the pubic bone until it shall have been secured, drawn out, and made fast by suture to the pillars of the ring. I hereunto append a brief history of three cases, which, through rupture of the ligaments, were at the time classed as failures, but which unexpectedly gave gratifying results:

CASE I.—Catharine G., aged twenty-seven, married; has had two living children, the youngest being three years of age. Attributes her trouble to a miscarriage at seventh month five years ago. Complains of pain in the head, stomach, and back, and radiating pains extending down right side. Menstruation regular but painful. On examination, find retroversion of uterus and prolapsus of right ovary, the latter being somewhat enlarged and very tender; uterus adherent. The adhesions were broken up by the Schultze method, and the fundus brought forward to the abdominal walls. Operation, Saturday, January 12, 1889. The ligament of the right side was about the size of a chicken's quill, that of the left being not larger than a knitting needle. Both were quite firmly adherent, and required much tact in separating them, the left breaking in the act. An injudicious attempt to bring the uterus farther forward caused the right ligament to break also. In this case an erysipelatous inflammation ensued, with suppuration, extending between the muscular layers as far up as the hypochondriac region. An examination, made ten days after the operation, revealed the uterus in a normal position, which it continued to maintain up to the time of the discharge, which, owing to a tedious convalescence, was several months after. The patient improved greatly, and was sent home feeling quite herself again.

CASE II.—Mrs. Martha B., aged twenty-seven, has had two miscarriages; suffers from pelvic pains and dragging. Found uterus completely retroverted with adhesions. Adhesions broken up, under ether, by Schultze's method, Saturday, March 8, and uterus replaced. Monday, March 10, there being no reaction from Saturday's work, cut down first upon left ligament, which was found without much difficulty, and of fair size. Traction to overcome adhesions resulted in its breaking high up in the canal. The right ligament was now gone after and found to be very slender. Could not make it run, though it was brought out one and a half inches. The wounds were closed in the ordinary manner and the patient put to bed. Operation a failure. March 17, examination reveals uterus in normal position, and as it

never before remained so, even for a few hours, it is possible that the result may be better than anticipated. Six weeks later the uterus remained in its normal position, and the patient was discharged after adjusting an Albert Smith pessary.

CASE III.—Rebecca M., aged thirty-two. Four years ago fell on the ice, since which has been confined to bed most of the time. On examination, I found the uterus retroverted, which being replaced, and a pessary introduced, gave marked relief. Not wishing to be dependent on the pessary, she chose the more radical relief by the Alexander operation. Accordingly, on March 25, the operation was performed at St. Francis' Hospital. Both ligaments gave way after being drawn out about two inches. Suppuration ensued, and she was kept in bed about five weeks. Repeated examinations showed the uterus firmly in place, and any attempt at retroversion was accompanied by dragging and pain in the hypogastrium. Before being sent home a pessary was adjusted.

These patients have all passed from under observation, and with one exception, the last, I have been unable to communicate with any of them. I will not presume to say that the results are permanent, but, to say the least, they are striking and suggestive, and should lead to further investigation. Neither do I know how to explain the phenomena except on the ground of spastic contraction of the ligaments under the influence of peripheral irritation incident to operative interference. This, of course, presupposes that the ligaments have maintained adhesion or contracted new ones within the canal. We have analogous conditions in the spastic contractions of the extremities and in the condition of both cells, but more especially in the temporary contractions of the spermatic cord in urethritis, when the cord is shortened and the testicle drawn well up independently of the dartos. Should future observation prove these conditions lasting and their induction practicable, a suggestion for the use of electricity or other form of local irritation is clearly patent.

The Polyclinic.

COOPER HOSPITAL.

CONCUSSION OF THE SPINE.

IN structural changes in the spinal cord following injuries, whether the injury results from a fracture of the vertebrae, laceration of the spinal cord, hemorrhage into the spinal canal, or inflammation of the cord and its membranes, certain well-defined and easily recognized symptoms are developed. But that hyperæmia or anæmia of the cord may follow an injury, at an indefinite period, as a result of the shock of the injury, is questionable. Several years' experience as a railway surgeon has *not* shown me that such conditions exist independently of structural changes in the cord. In suits for damages against railway companies such conditions are generally built by experts from subjective symptoms.

Unlike the brain, the spinal cord is particularly

protected against shock. It does not fill the canal in which it is contained. Its investing membrane does not form a periosteum to the bones, but is separated from the spinal column, and protected from it by areolar tissue and plexuses of veins. Neither does the membrane, like that of the brain, send partitions into the fissures of the cord. It loosely surrounds the cord, and is separated from the walls of the spinal canal, only sending from its sides prolongations to protect the spinal nerves in their exit through the intervertebral foramina.

If the conditions named above are brought about through the medium of the sympathetic nervous system, they must, if functional, be transitory; if organic, they must give rise to the well-known symptoms of structural disease of the cord.

The result of a suit for damages against a railway company for the condition known as a "railway spine" often produces a speedy cure.—*Godfrey.*

MEDICO-CHIRURGICAL HOSPITAL.

CASE OF ENTERECTOMY FOR STRANGULATED HERNIA.

Reported by John W. Croskey, M.D., Chief of Clinic.

JNO. BURNET, aged twenty-nine, American born. Was admitted to the Medico-Chirurgical Hospital, May 15, 1889, suffering from a tumor in the left inguinal region. He presented the following history: Five years ago he had an attack of gonorrhœa, about one year later he had a second attack which left him with a stricture of the urethra. This was cut by the late Prof. Gross about two years ago. Following this he had two more attacks of gonorrhœa and recently he was able to urinate only after the greatest straining, which would cause a spasm of the entire body. On Thursday, May 14, 1889, while following his vocation, that of a fish monger, he was seized with a desire to urinate. He got off of his wagon and after making an effort which failed, he was taken sick at his stomach, and while vomiting was seized with an intense pain in his groin, which prevented him from assuming the erect posture. He was taken home and a doctor was sent for, who diagnosed an indirect inguinal hernia. He was given ether and an effort was made to reduce it but with no result. It was then decided to send him to the hospital; and on Thursday, May 17, forty-eight hours after the occurrence, he was operated upon by Prof. H. Earnest Goodman with the assistance of Prof. Montgomery.

The operation consisted of an incision made over the tumor in the right inguinal region, by pinching up a fold of the integument and by one cut dividing the skin, after which the tissues were successively divided down to the peritoneum, this was then picked up with a pair of forceps and nicked, after which five inches of the bowel and about nine inches of the omentum were disclosed as being strangulated. Mortification had already begun, the intestines and omentum being quite black and softened. It was decided to resect the bowel, and after compressing both ends of the intestines five inches of the ilium were removed and nine inches of the omentum ligated and cut off. The two ends of the intestines were brought together

with the Czerny-Lembert suture. To make the union more secure some fine black silk sutures were passed through the peritoneal covering about one-quarter inch back from the inside line of sutures on each side and drawn together. The mesentery was united by the uninterrupted catgut suture. The parts were then washed with some silico-fluoride of sodium (1-1000) and afterwards with some hot water, when the parts were returned. The wound was united with silk-worm gut, leaving in a glass drainage tube. The wound was dressed with iodoform and cotton and a spica bandage of the groin was put on. After the operation the patient rallied nicely. To allay thirst injections of hot water were used and the patient was given nothing until the next day. The day following, May 18, the temperature was normal, pulse 100. Bovine was ordered every two hours and warm injections every three hours.

May 19.—Morning temperature 103° F.; evening temperature 100.1; bowels moved twice.

May 20.—Morning temperature normal; evening temperature 100.2°.

May 21.—Morning temperature 99.3°; evening temperature 99.4°; one movement of bowels; drainage tube removed.

May 22.—Morning temperature 99.3°; evening temperature 98.2°; four movements of bowels.

May 23.—Morning temperature 99.3°; evening temperature 98°; one movement of bowels.

May 24.—Morning temperature 100°; evening temperature 101°; one movement of bowels.

Cream and bicarbonate of soda added to the diet.

May 25.—Morning temperature normal; evening temperature 100.3°; one movement of bowels.

Cream toast and milk punch added to diet.

May 26.—Morning temperature 99.3°; evening temperature 99°; one movement of bowels.

May 27.—Morning temperature 99°; evening temperature 98°; one movement of bowels.

Meat juice added to diet, two grains of quinine three times daily.

May 28.—Morning temperature normal; evening temperature 98°; one movement of the bowels.

May 29.—Morning temperature 98.3°; evening temperature normal; two movements of bowels.

May 30.—Morning temperature normal; evening temperature 99.3°.

June 18.—Patient is up and doing well, functions appear perfectly normal.

POLYCLINIC NOTES.

Contributed by Dr. George M. Gould.

ENDO-AUSCULTATION.

A NEW method of physical examination has been devised by Bianchi, which consists in making use of the common œsophageal tube passed into the stomach to auscult the gullet and stomach, and through them the heart and lungs. The tube is bifurcated at the upper end and with ear-pieces, as in a binaural stethoscope, and the inventor says sounds may thereby be detected indicative of a smooth or rough condition of the mucous surfaces over which it travels, the presence of foreign bodies, diverticula, tumors, etc. From the weakness or absence of the

cardiac and respiratory sounds conclusions may be drawn as to the thoracic organs, the walls of the stomach, etc.

THE RELATION OF MALARIAL AND TYPHOID FEVERS TO PHTHISIS.

In the last most admirable report of Dr. Seaverus, the Medical Examiner-in-chief of the Royal Arcanum, he finds that the records of the order seem to show an exceptional tendency to the development of phthisis in those who have previously had typhoid or malarial fever. No definite statistics are offered, but the suggestive question is asked if there be such a causal relation, or if examiners do not disregard incipient consumption under the mistake that it is only a simple malarial affection?

DEATHS IN LONDON STREETS.

In 1869, the number of deaths from accidents in the streets of London was 192, and in 1888, 237. This is an increase of 23 per cent. It is of interest to note that during this time the population increased 34 per cent., and that the deaths increased from 1869 to 1882, when the number was 271, decreasing steadily since despite the increase of population.

DISEASE OF THE NIPPLE.

Dr. Darier claims to have proved that Paget's disease of the nipple is of parasitic origin, and suggests that this discovery may be the first step towards the elucidation of the nature and mode of origin of some epitheliomata.

POST-MORTEM SWEATING.

Cones (*Lancet*) cites a case believed to be unique, in which a large amount of sweat was poured out after death. Pilocarpin injections had been given before death, but not later than three days prior to death. The sweating was first noticed some sixteen hours after death, and continued profuse for eight hours thereafter.

ARTERIAL MURMURS.

Dr. Phillips (*Lancet*) thus summarizes his conclusions upon this subject:

1. A murmur is sometimes audible in the subclavian artery immediately below the clavicle, which is not the result of organic disease or of pressure upon the artery, and is most common in anæmia and other conditions where there is defective adaptation of the arterial wall to the blood-current.
2. The various circumstances influencing the production and rhythm of the subclavian murmur are dependent upon its anatomical position and the respiratory movements.
3. Murmurs may be often heard in anæmia in the large branches of the aorta within the chest.
4. The respiratory movements have a marked influence on the character of anæmic murmurs in arteries arising within the thorax.
5. The murmurs heard in the subclavian and pulmonary regions in some cases of phthisis, inasmuch as they may exist without phthisis, must not be regarded as diagnostic of that disease, and are not produced by pressure of consolidated lung, in most of the cases where they co-exist with phthisis.
6. Murmurs may be originated in intra-thoracic arteries from traction upon them by the displacement of the heart in pleuritic effusion.

London Letter.

NEUROLOGY IN ENGLAND.

By L. HARRISON METTLER, AM., M.D.,

Lecturer on Mental and Nervous Diseases and Electro-therapeutics in the Medico-Chirurgical College of Philadelphia.

IF there be anything in the disposition of a Briton for which he is more famous than anything else it is his *sang froid* and abundance of nerve. It was that which made him stand firm before the avalanche of steel at Waterloo, and gave him the victory over the barbarous hordes of the scorching Soudan. Paradoxical as it sounds, nervousness really means a lack of nerve; and yet it is equally true of all the other organs of the body, that the less their owner knows subjectively about them, so much are they in the better state of health. Individuals and nations of a neurotic type are not so because they are more abundantly supplied with a nervous system, but because that nervous system has less of the *power of resistance*, which in its integrity is one of the prime requisites of health. To *act* and to *resist* are the special functions of nervous matter, and when one or the other predominates as the result of climatic and hereditary influences in the races and of degenerative and inflammatory diseases in the individual, we have an abnormal neurotic manifestation. In regard to race-types it is an extremely difficult matter to draw any precise lines; but if equilibrium, as manifested by the amount and quality of work done, with the minimum of suffering and decay, be the measure of popular health, then one must *à priori* award the palm, in regard to nervous health, at least, to the English speaking races. And so the facts prove; for with these races there are, comparatively speaking, less of the so-called *functional* diseases, when counted side by side with the *organic*, than there are in others. The Latin nations, for instance, being of a decidedly neurotic type, offer the most splendid opportunities for the study of the functional diseases; on the other hand, the Saxon races, being of a less neurotic type, present the best and most numerous examples of the organic variety.

Hence, neurology in England is of a more practical character; has, if I may be permitted the expression, more of a mechanical ring about it than it has in France or Germany. And this is also shown by some of the more prominent views held by English physicians in regard to many of the debatable functional diseases. Doubtless the rheumatic origin of the choreas is so strenuously urged by the London men because of their dislike to believe in any abstract reasonings about *balance of function*, etc., and because their experience with chorea of organic origin is the more extensive. Note, in regard to the epilepsies, how many of the views here are based upon its organic origin, and, doubtless, because here the type of the race causes a preponderance of the really organic epilepsies over those of the non-organic type about which the French authors write so much. The belief of Dr. Ranney, which he has acquired from experience, that nearly all epilepsies are dependent upon eye-strain, would find much quicker favor

among these English physicians than among the French or German. In regard to the *localizations*, both of the cerebral areas and spinal tracts, one can clearly distinguish the practical, almost mechanical, line of thought common to the English race. The unitarian views of Goltz in regard to the workings of the brain and the close intercommunication of the various transmissions, so strenuously urged by Brown-Séquard, do not please so well the Anglo-Saxon intellect as the more bald statements of Turner, with regard to the marked limitation of the cerebral areas, making the brain, with its various hemispheres and lobes, truly a *composite* organ.

And yet, though not psychologically inclined, Great Britain has done wonders towards advancing our knowledge of the nervous system, as all the world knows, and as I have had the opportunity to witness, after some weeks sojourn in Scotland and England.

But, after all, neurology, as a distinct science, may be said to be confined to London, for outside of this great metropolis there is not within the whole United Kingdom a single large hospital solely devoted to this specialty. But though The Nation of London, as De Quincey so aptly calls it, is quite adequate to supply material for the study of all phases of neurotic diseases, it is not dependent upon its own resources, for the hospitals, and one in particular, of which I will speak shortly (because of its superior appointments), receive cases from all the provinces, and not a few from other parts of the world.

This scarcity of hospitals for the special treatment of nervous diseases is not a little singular, when it is remembered how cold a welcome these unfortunate patients receive at the general hospitals, firstly, because of the long time their treatment usually requires, and, secondly, because of the extreme attention which must be given to most of them, two things which a busy general hospital finds itself unable to afford. Specialism is, undoubtedly, the evil of the day, and yet if one would want a conclusive argument in favor of the better results obtained by the specialists in neurology, he has but to watch for a time the workings of such hospitals as the Orthopædic and Infirmary of our own city, and the National Hospital for the Paralyzed and Epileptic of London. The latter is a richly endowed institution, and had we the time and space we could write a paper itself on the artistic beauty of its building and the systematic regularity of its regime, all being for the best interests and comfort of the inmates. When I mention that on its staff we find such men as Radcliffe, Hughlings-Jackson, Bastian, Gowers, Ferrier, Adams, and Horsley, the reader will understand why I have selected this Hospital for the expose of British neurology. And here I must express my indebtedness to several of these gentlemen for the courtesy which they extended to me while in London.

Sir Crichton Browne says: "True, just two diseases stand prominent in the title of the Hospital, but each covers a whole multitude of maladies. We have epileptics ranging from such 'weird seizures' as the laureate has described up to convulsive explosions, sudden and terrible, as if the brain were made of dynamite. . . . And we have paralysis rang-

ing from weakness in a finger up to death-in-life of the whole body."

Furthermore, a special hospital that averages five hundred cases a year will, of necessity, present all phases of its special diseases, though here, as elsewhere, most of the cases may be grouped under one of the two classifications of *degenerations* and *inflammations*. Degenerated tissues, of course, cannot be replaced, but under special and usually prolonged care the progressive destruction may be checked and the patient permitted to pass the rest of his life with what powers he has still left to him. And in so delicately organized a structure as the nervous system an inflammation needs more, both of time and attention, for its cure than can usually be given in a general hospital. As is well known, a large amount of surgery is associated with neurology, and this hospital has a large service of this sort as well.

As soon as one enters the building he is impressed with its artistic beauty, for the vestibule, large and airy and into which open the various corridors, is floored with marble mosaic, has its walls decorated with attractive colors, brightened by the bright rays of the sun streaming in through the stained windows, and its ceiling supported by beautiful Parisian columns. This first agreeable impression is not lost in passing on through the rest of the hospital, for the rooms and wards are all as bright and cheerful as they can be made. These are not trifles that we are dwelling upon, for I soon learned that in their treatment the London neurologists laid unusual stress upon the environments of their patients, insisting that they should always be of a bright and sunny character, and thus many a hopeless melancholia and obstinate hysteria has been made to disappear when the patient was removed from the wretched surroundings of his own poor hovel to the homelike rooms of the hospital. It is found that epileptics escape many of their usual attacks as long as they are kept engaged at something; so in some of the wards these poor sufferers, happier now than they were formerly, are seen sewing and constructing various articles, and are encouraged to various sorts of mental and muscular amusements. Watching them at their meals one will note how systematically they are drilled to follow the nurse at the head of the table. This is done to keep their attention from themselves as much as possible; at any rate it certainly favors the treatment that may be in the course of application by keeping off many attacks.

In the out-patient's room are comfortable benches for 200 or more persons. At one end of the room a certain Samaritan Society has arranged a refreshment counter, where a cup of tea or coffee with a piece of bread and butter is supplied for a penny. What a boon this would be to some of the patients of one of our hospitals, who are kept waiting for hours hungry and tired!

The wards, distempered in French grey and surrounded by large windows, admitting plenty of sunlight and capable of affording ventilation without draughts, consist of two apartments, a day room and a dormitory. Each ward has its own kitchen, bath-room, and offices. From twelve to eighteen occu-

pants fill a ward. There are also smaller wards and private rooms for those who can and are able to pay for the privilege.

Electricity receives considerable attention here, both for its medicinal properties and aid in making diagnosis. About one-sixth of the whole number of patients undergo some form of electrical treatment. Though the electrical room contains a formidable array of apparatuses, galvanic, static, and faradic, the principal one used is quite unobtrusive, being only a table supporting a few insulated wires connected with a resistance coil and a galvanometer. The electricity is generated by a dynamo run by steam in a room below.

Most of the cooking is done by steam and gas, thus saving labor and preserving cleanliness. Steam is the mode of heating the rooms. There were many other details that I noticed about this comparatively new though well-known hospital, but I have only mentioned some of the more particular ones to show the practical determination of the London neurologist to try and secure for the long neglected class of nervous affections a better history of cures. And they are doing it, with some of the most obstinate cases. Excisions for neuralgia, suspensions for ataxia, trephining for traumatic epilepsies, electrical treatment for aphasics and paralytics, have afforded a notable percentage of happy results. Even the dreaded operations upon the brain and cord, usually so fatal, have here met with decided success. But in addition to all this, the wonderful strides taken in our knowledge of the nervous system and its disorders, with the advantages of comparison afforded by such a hospital as this must necessarily be of the greatest advantage to the outside general practitioner. Whatever may be one individual's opinion about the extreme views of some of the more advanced neurologists we must admit that they have opened up for us new methods of investigation and new facts.

As examples of the kind of work done at the National Hospital for the Paralyzed and Epileptic I may cite such cases as:

A girl of seventeen years of age, who had completely lost the use of both legs and one arm when she entered. The other arm was weak and there was loss of sensation in the lower part of the body and legs. Exhaustion and bed-sores had brought her almost to a dying condition. It took fifteen months to give her a perfectly healthy look and to restore the full use of both her arms. The power to walk had not yet been fully attained, though it had been wonderfully improved.

A hemiplegic, aged forty-one, who had been ill some fifteen months, with fits once a week and oftener, remained in the hospital about four months. There was a marked diminution in the number of fits, and nearly a complete restoration in regard to the hemiplegia when he left.

Obstinate neuralgias are usually treated by excision with the happiest results. In one case of a cranial nerve neuralgia of twenty years standing, the excision has so far given complete relief.

It is a medical treat to watch Mr. Victor Horsley in one of his private operations. The bright and

well-ventilated room, with its cases so clean and orderly, the extreme tidiness and ready attention of the "sisters" in waiting, the instruments on the table all so bright, of such large variety and so completely immersed in the antiseptic solution, the particular care to avoid any spattering of blood, all indicate the careful surgeon who recognizes the fact that success in his department is dependent upon attention to details. The spray is employed, and for the anæsthetic, chloroform. We were charmed with the perfect coolness and ready knowledge which this operator displayed in one of his excisions of the infra-orbital nerve, trephining the antrum and severing the nerve immediately after its emergence from the cranial cavity. A little electric light fastened by a strap to the forehead and furnished with a condensing lens enabled him to completely illuminate the antrum. The bromides are the mainstay here in the medical treatment of epilepsy. The general regimen and eye-defects always receive special attention in this affection, and as we have intimated before, there is something novel in giving special occupations and regular drills to epileptics. But the results seem to favor the adjuvants to the regular treatment.

An interesting case was that of a lad, seventeen years of age. He had had fits for three years, sometimes seven or eight a day. The third day after his admission he had two severe and two slight fits. During the next fourteen days he had only two slight ones. During the succeeding eighty-seven days no fits, and he was finally discharged cured.

A woman, twenty-nine years of age, had been subject to epileptic fits for ten years. The severe fits occurred every two or three weeks; slight ones, many every day. After her admission to the hospital she had no severe fits. During the first month they were slight, ranging from six to fifty a day. She remained in the hospital three months, during the last of which she only had five of the "petit" variety altogether, and so on. Of course, failures in the cure or even relief of these intractable nervous affections occur here as elsewhere, but the percentage of cures balances by far in favor of the special treatment of these diseases as it is afforded in the special hospital.

Not only in this treatment do we see the practical, almost mechanical, turn of mind of the British neurologists, but even in the forming of their diagnosis as well. Unlike the Germans, who revel in their abstruse reasonings, or the French who pore over their tomes of accumulated cases and inexhaustible varieties of nervous diseases, the English physicians only care for theories and classifications so far as they enable them to comprehend the nature of the trouble for its more complete and radical cure. Anyone can see this for himself by a glance through Gowers' work on "Nervous Diseases," which is an admirable portrayal of the author's method in the hospital: exact, minute, and looking always to the appropriate and available treatment.

Dr. Ferrier told me that he had now employed many times Charcot's suspension treatment in ataxia with always more or less favorable results. Of course, the question as to the permanency of the relief is still *sub judice*.

A large proportion of the out-patients which I saw at this hospital were cases of ataxia of specific origin, to whom the iodides were administered as usual.

In a remarkable case of ataxic aphasia, the frequently extreme emotional character of these patients was shown by the man crying out like an infant almost every time he was spoken to and attempted to answer. Nothing outside of general treatment was instituted in this case, as it was to be admitted to the wards later on.

Another out-patient illustrated in a marvelously clear manner how often tapping of the head and the corresponding sensation of pain, will localize a lesion. When tapped with the finger over a small area in the region of the occiput, the lad suffered such pain as to grasp the hand of the physician, while over the rest of the head he could be struck quite vigorously without feeling pain. The real interesting point of the case, however, was in showing how closely the other and more distant symptoms of localization tallied with this simple one. There was doubtless a certain amount of circumscribed meningitis along with the tumor in this case, and in all probability it was the meningitis that caused the pain.

Such are a few of the class of cases met with in the routine work of one of the largest and most elegant of the London hospitals, and while I could relate more, and even these in greater detail, I fear that the reader is already weary, and particularly if he be one of those who bear a little opposition to the "specialties." For his benefit then I will end by quoting what a certain doctor once said in answer to an inquiring layman about the special hospitals. "Why one would think it needed as many hands to cure a patient as it takes, we are told, to turn out a pin. Stuff and nonsense, sir! This minute subdivision of medicine and surgery into a multitude of specialties is ruinous to the best work, and both science and patients suffer when the physician or surgeon sees nothing beyond the limited field of vision upon which his whole professional attention is riveted. At the same time the area of knowledge is so vast now and the problems of our later day life are become so complex, that no man's sight can penetrate everywhere alike, and there are, and it is well there should be, specialists of the right type—that is, whose specialism is not the root and branch of their knowledge, but its blossom and fruit." If I wanted to be dogmatic I should say that special hospitals are only wanted for maladies not readily treated in general hospitals, and that the only right kind of special hospitals for treating such maladies are those which possess the services of men who can bring to bear the microscopic powers of a single eye when it is necessary so to adjust it, but are equally capable of using both eyes and can sweep the whole landscape. Our own sentiments precisely.

LONDON, May, 1889.

THE children of Dr. William T. Lusk, of New York, have benefited by the death of Mr. Chittenden, the Brooklyn millionaire, to the extent of nearly one million dollars each. Dr. Lusk has his summer residence at Newport.

The Times and Register

A Weekly Journal of Medicine and Surgery.

New York and Philadelphia, July 6, 1889.

WILLIAM F. WAUGH, A.M., M.D., Editor.

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THE AMERICAN MEDICAL ASSOCIATION.

THE meeting at Newport differed widely from its immediate predecessors. There was a small attendance; not over seven hundred and fifty registering at the outside. This was due to several causes combining. The Old Colony Railroad refused to make special rates, and the other roads consequently withdrew their offers to do so. Then, at the last moment, the Old Colony announced the reduction, when it was too late to take advantage of it, or to get the other roads to do likewise. The road ought to be boycotted by every friend of the Association.

The second element determining the small attendance was the absence of anything like a fight. We are very scientific, especially in the East, but we still take interest in a struggle for superiority.

Finally, the town of Newport presents no attractions to the physician, such as are to be found in the great medical centers—colleges, hospitals, clinics, and the great teachers of the day. In all respects our predictions in regard to Newport were fulfilled. The one hotel was crowded to repletion; so that many were unable to obtain even one of the antediluvian beds which almost completely filled up the cells in which we were to spend the nights. The cooking department broke down: so that guests were compelled to wait in front of the dining-room door for over an hour after the Sections opened their meetings before they could be served. For this, Newport could hardly be blamed, as she never made any pretense of being a city of hotels. It is to be hoped that things will be better in Nashville next year.

The Address of President Dawson dealt with medical education, medical literature, and the achievements of modern surgery. He discussed at some length the question of legislation upon medical matters, and opposed the creation of Examining Boards composed in part of irregulars.

The Address in Surgery was a feature of the meeting. Dr. Conner had certainly an abundance of ma-

terial in the surgical work of the present generation, and he used it judiciously. He protested against the extravagant hopes which see in failure only an evidence of neglect on the surgeon's part, and recommended a collective investigation upon the subject of carcinoma.

The Address in Medicine was a disappointment. Those who had heard the brilliant clinical teacher of the University of Pennsylvania, looked for something in this Address which would in itself repay them for the journey and the inconveniences of the sojourn at Newport. Instead of this, they heard a stale biography of Rush. Dr. Rush was a very worthy gentleman, and we sincerely hope Dr. Gihon will succeed in raising a monument to his memory; but that is no reason why he should be foisted upon an audience which had collected from all parts of the country to hear Dr. William Pepper's views upon modern medicine.

In the selection of Dr. E. M. Moore, of Rochester, as the next President, the Association honored itself and testified its appreciation of his work, his services to the profession, and his devotion to the welfare of of the Association. We have been credibly informed that the candidate put forward in opposition to Dr. Moore failed to get a single vote outside of his own State; but whether this arose from the popularity of the one or the dislike of the other we are unable to say. The direction of the Journal is left in the same capable hands as during the past few months; the trustees being strengthened by the addition of Drs. Hooper, Garcelon, Love and Dawson. If the only question in this connection were the efficient management of the publication, there would be little to object to in this arrangement. But as long as there is no ostensible head to the Journal there will be intriguing and wire-pulling by persons who desire the post of managing editor. Some of these parties will do all in their power to embarrass the present management in order that their own selfish interests may be subserved. Factions will endeavor to thrust into the seat men who have been their tools in times past. These annoyances would have been prevented by the selection of a strong man to fill the chair. One cannot but admire the effrontery with which some of these men urge their alleged claims. Editors who have been persistent enemies to the Association, or who have been the most egregious failures in every sense, consider themselves fit to fill N. S. Davis' shoes!

The social features were not so elaborate as on former occasions. By far the most enjoyable was the excursion of the Medical Editors' Association, which was in all respects a success, and will long be remembered by the participants. But one unpleasant incident marred the harmony of the occasion. By some mischance, the last toast was assigned to a person who represented a pharmaceutical journal's advertising interests; and this man had so little conception of the amenities of civilized life that he em-

braced this opportunity, at a social gathering, to make a bitter attack upon an enterprise recently launched by one of the guests present, for which he freely predicted bankruptcy. The address was heard with surprise, which would have assumed the form of active indignation, were it not that the insinuations were couched in such obscure terms that few understood what the speaker was driving at. It is to be hoped that in future pharmacy will be somewhat more worthily represented. As the *Druggists' Circular* is in no way affected by the success or failure of the scheme referred to, it is evident that its advertising agent was simply put forward by some parties whose interests are more directly influenced; and who chose as their representative a man who was the only one connected with a pharmaceutical journal who could be induced to do their dirty work. That this was done with the deliberate intention of doing an injury to the project in question is shown by the fact that several slips containing the remarks in question were printed and mailed to the medical journals on the Saturday following. It is evident that somebody is pretty badly scared at the favor with which the consolidation journal has been received.

The clam-bake tendered to the Association by the Rhode Island Medical Society was a very elaborate affair, and was enjoyed by the guests.

Annotations.

AURAL EXAMINATIONS FOR RAILWAY EMPLOYEES.

IN occupations that have to do with human life it is of the utmost importance that every possible safeguard be erected for the protection of life.

There is no other occupation in the country of such magnitude and danger, or with which the whole population is so intimately concerned, as that of railroad-ing. Even though a man may never ride in a railway coach, he can hardly go a few miles from his home without having to cross a railroad track. And every day thousands upon thousands trust their bodies and their lives to the carefulness and abilities of a comparatively few of their fellow beings.

Railroad employés, then, having in their charge such valuable freight, should be picked men, whose common senses are as nearly perfect as possible.

Since the discovery of color blindness the cause of many former railroad accidents has been found out, and that menace to human life has now, in great measure, been removed. But there is danger through another sense, heretofore little spoken of—that of hearing.

At the late meeting of the National Association of Railway Surgeons of America, held at St. Louis, Dr. Robert Barclay read an interesting paper bearing on this subject, and holding that all those who apply for railway positions where hearing is of any moment, should be carefully examined by an aural surgeon, and that those also who are in service should be peri-

odically examined, in order to discover if their hearing is degenerating.

These views we heartily endorse, and trust that railroad employers will give the matter the attention it deserves.

QUACK ADVERTISEMENTS.

QUACK advertisements must be found as frequently in the religious press of England as they are here, for the *Hospital Gazette* lately contained a strong condemnatory article on this subject.

When physicians write or speak against the evils of this practice there are none more ready to charge them with interested motives than the religious press. But these very papers, which ought to be as nearly as possible patterns of purity, advertise patent medicines for which the most absurd and unreasonable claims are put forth, such as consumption cures, cancer, and tumor cures, and the like. One may notice that a reverend gentleman, whose present address is some Bible house, while acting as a foreign missionary, had his attention called to a combination that is a specific for "nervousness, weakness, the indiscretions of youth," etc.; and although he is no longer a missionary, his philanthropic spirit is just as large as ever, so he will send this recipe, securely sealed, free. Cures for the opium habit are advertised, that have been proven by competent chemists to contain opium; cures for the slave to drink, that are known to contain alcohol. But it is needless to particularize; these abominations every medical man knows.

The columns in nine religious papers were examined a few days since, with the result of finding seventy-three quack advertisements. One of these papers contained as many as eighteen; but another, again, had only one. A religious newspaper with eighteen advertisements representing consumption cures, asthma cures, rupture, skin disease, blood disease cures, kidney and liver disease cures, opium and alcohol cures, does not impress us as exhibiting a high state of either intellectual, moral, or religious culture in its proprietors or its readers.

Letters to the Editor.

A SAMPLE.

I HAVE this to say—viewing the combination or "trust" from a busy practitioner's standpoint—the union of the two journals has detracted nothing from the value of either. On the contrary both are improved in the one.

THE TIMES AND REGISTER stands, to-day, the best medical weekly published for the busy general practitioner, and equals in every respect any of the five-dollar weeklies.

While I am a free trade democrat, and opposed to "trusts" generally, I verily wish there were more of the sort represented by the blending of such agencies for the propagation of elevated medical thought.

Wishing your enterprise much success.

SHARON GA.

ARTHUR C. DAVISON.

POSITIVISM IN MEDICINE.

ALL the physical sciences are positive sciences with the exception of medicine. It is a complex science, and some of its parts are positive enough. Its general anatomy, physiology and chemistry are, as far as they have been developed, decidedly positive. Histology and pathology will go on enlarging as long as the microscope will be susceptible of improvement. But take its ætiology: what fluctuations does it not experience? what circles is it not made to travel? At one time it attributes disease to contagium; at another to infection; at one time to an organic morbid germ; at another to a chemical alkaloid, and at another still to molecular disturbance. The germ theory has run riot. Yet, notwithstanding its popularity, the theory of molecular disturbance, as causative of inflammatory processes, is more rational than that of an organic germ. Accepting, as we do, the doctrine of the cellular structure of all organized bodies, and the constant activity of those constituent cells, it is conceivable that that activity might become so disturbed as to amount to any degree of abnormality.

The "schoolmen" of the middle ages used to dispute as to how many angels could stand upon the point of a needle, and now physicians are speculating as to how many morbid germs can occupy a microscopic point of the human body.

This germ theory has been over-done, and sooner or later will experience a reaction that will establish its proper pathological position. According to its tenets now, the soil, water and atmosphere are but the abodes of infection and death. Suppose two germs should individually, but simultaneously, invade an organism and set up distinct morbid processes therein, say of scarlet fever and diphtheria, who has the positive diagnostic skill to decide that fact, and where and how would we draw the line of demarcation? Why does the physician, in his daily rounds, see in the same neighborhood, and perhaps in the same family, one case of typhoid fever, another of pneumonia, another of diphtheria, and so on, and all having about the same environments? The germ theory alone will not explain the phenomena. There must be some internal, idiosyncratic condition that particularizes each case, but a positive understanding thereof is yet to be evolved. Why does the same exciting circumstance set up in one case mere simple ulcerations, in another benign growths, and in another cancer?

There is no rule of reasoning yet known that can give a demonstrable solution to that extraordinary differential pathogenesis. The argument of heredity will not alone answer. There was a time, however remote, when the ancestors of the present generation of cancer subjects did not have cancer. We can only accept the philosophy of agnosticism and say: "we do not know."

Yet, notwithstanding that this subject of primopathogenesis is as yet impenetrable, the recognition of disease when once upon us, has been reduced to a positive science—diagnosis. With the present facilities for physical investigation; with a full armamen-

tarium of examining instruments; with the urinary tests; with auscultation and percussion, a fatal error in diagnosis is inexcusable. The negative process of diagnosis—reasoning by exclusion—often confirms the positive one. In no department of science is positive reasoning more demonstrable than in disturbance in the cerebral function. With a solid bony structure between the seat of disturbance and the physician, he can yet trepan the exact spot. That is an achievement of the intellect alone and marks the positive possibilities of anatomico-physiological science.

The most deplorable circumstance in medicine is the evanescence of the systems of treatment. In it there is no permanence, no stability. Scarcely is one method accepted till another displaces it. New agents, whose active principles are unknown, and whose physiological action has never been tested, are constantly substituted for known and tried ones. Take, for instance, the antipyretics—and they are as the leaves of the forest in number. Physicians go wild over every new one that is announced, as if lowering temperature were curing disease. Take, if you please, typhoid fever, with the germ theory of its causation, and antipyretics can only modify the combustion; and modifying the combustion is only prolonging the stay of the intruder. If the so-called antipyretics at all benefit infectious diseases they do so by virtue of their germicidal properties. The cardiac inhibitors, such as aconite, invaluable in sthenic inflammations, are now largely displaced in country practice by mere heat reducers. They are given empirically, irrespective of their action in heat production, heat distribution, or heat radiation. Just contemplate the late craze on intestinal insufflation of gases in pulmonary tuberculosis. It was not only offensive to the senses, but disgusting to the understanding. Again, look at blood-letting, a most positive adjuvant in the treatment of inflammatory conditions in plethoric subjects. It has passed into almost entire desuetude in favor of the expectant plan of treatment, but more properly called the negative plan. All the mechanical ingenuity of the mind is strained in devising instruments, and all nature is searched for curative agents, but whether the science of medicine, as a unit, will ever be reduced to a positive science remains for yet distant ages to see.

U. M. SNYDER, M.D.

DELMONT, PA.

HOW CHLOROFORM REDUCES TEMPERATURE.

IN Dr. H. Culbertson's interesting article, in a recent issue of the TIMES AND REGISTER, p. 149, I find the following:

"When after death, in a chloroformed subject, the skin is cut, its substance is pale and bloodless. I have never lost a patient from chloroform, but under the profound influence of this agent I have seen the human patient pale and cold. Why is this? Is it not due in part to the nerve of Cyon and Ludwig being paralyzed?"

It appears highly probable that this question ought to be answered in the negative. I gather from the "Physiological Lectures" of Prof. Kuss, of Stras-

burg (Duval, Amory, Amer. Ed. p. 168), that the nerve referred to has no direct influence on the heart at all, and only influences it indirectly through the peripheral circulation.

How chloroform, ether, chloral, alcohol, and agents of this series, lower temperature, will be understood by a perusal of Dr. Lyman's "Anaesthetics" (Wood's Library). It is there stated that this effect is due to a retardation of the process of oxidation normally taking place in the body, on which the generation of its heat depends. The lowering of the temperature in poisoning by chloral hydrate and by alcohol, is so marked that in attempting to recover the victim of these states, the application of artificial heat is a prime consideration.

The same diminution, or arrest, of oxidation, which lowers the temperature, causes also a loss of muscular contractile power; muscle force being the direct product of the oxidation taking place within the muscle. Hence, the relaxation or flaccidity found among the complete effects of the anaesthetic agents mentioned above.

I would like, in this connection, to invite the attention of the readers of the TIMES AND REGISTER to a paper, read by me before the Physiological Section of the Ninth International Congress, at Washington, in which this and cognate subjects are discussed at considerable length. The paper is, On the Necessity for a Modification of Certain Physiological Doctrines, etc.

Dr. Culbertson, in appealing to the modern inhibitory hypothesis, in elucidation of the phenomena to which he refers, appears to have overlooked the fact, that this hypothesis, has, of late, been seriously discredited, and an attempt even made to set it aside and supersede it, by no less an authority than Dr. Lauder Brunton, whose admirable "Pharmacology and Therapeutics" will amply repay perusal.

If the editor will kindly permit me, I may offer him, soon, a criticism on both the inhibitory hypothesis, and the new one of Nervous Interference, which has been suggested in its place.

THOMAS W. POOLE, M.D.

LINDSAY, ONT., CAN.

The Inquirer.

A CASE FOR DIAGNOSIS.

A LITTLE GIRL, aged about six, of healthy parents, was remarkably healthy until, say, six months ago, when she was suddenly taken with "cramps" in her bowels; since when the same attacks have returned at intervals of a week or less; cramps extending to the legs, so that she is unable to stand or walk; is taken suddenly *at play*, and falls all drawn up; cries out for her mother to rub her, but sometimes she is so sensitive over the whole skin that she cannot bear to be touched. Appetite good, no indication of worms, has been treated for worms; bowels regular, no pain at stool, urination free and easy, no trouble in passing water, no indication of stone, no tenderness over bowels or bladder, no tenderness

along spine, no indication of hip disease. She is a stout, well made, well developed little girl.

This is all I can say of her case. I give you the negative eliminations; there is nothing positive that I can see. She is evidently a great sufferer.

V. S. M.

[The given history of this case is that of recurrent spasms confined to the lower extremities, with intervals in which no aberration from health can be found. The indication is consequently directed towards a reflex cause, acting intermittently, and probably originating below the diaphragm. The search for this cause should be first directed to the bowels; then the kidneys and bladder. This has apparently been done by our correspondent. Then the genital organs should be examined for evidences of ascarides, or of masturbation. In such cases it is well, if an ordinary examination fails to reveal the cause of the symptoms, to strip the child to the skin and go over the body with the utmost care; scanning every outline and examining every organ. There may be a curvature of the spine, or commencing caries. Should such an examination fail, we must look to the general causes, especially bearing in mind the possibility of hereditary syphilis, of malarial, paludal, saturnine, or rheumatic toxæmia. The possibility of poisoning from patent medicines, etc., should not be overlooked. The hygiene of the house should be examined into, not inquired into, as well as the diet. Should there still be no tangible cause for the seizures, we would put the child upon a diet of peptonized milk exclusively, and give $\frac{1}{10}$ grain of corrosive sublimate, four times daily, keeping the child in bed for three weeks; applying a thin strip of fly blister to the lumbar spine once every five days.

W. F. W.]

Society Notes.

At the American Climatological Association meeting at Boston, Drs. C. W. Townsend and A. Coolidge, Jr., Boston, presented a paper on

THE MORTALITY OF ACUTE LOBAR PNEUMONIA; a study of all the cases treated at the Massachusetts General Hospital from the first case in 1822 to the present time.

SUMMARY.

1. In the one thousand cases of acute lobar-pneumonia treated at the Massachusetts General Hospital from 1822 to 1889 there was a mortality of 25 per cent.

2. The mortality has gradually increased from 10 per cent. in the first decade to 28 per cent. in the present.

3. This increase is deceptive from the following reasons, all of which were shown to be causes of a large mortality:

(a) The average age of the patients has been increasing from the first to the last decade.

(b) The relative number of complicated and delicate cases has increased.

(c) The relative number of intemperate cases has increased.

(d) The relative number of foreigners has increased.

4. These causes are sufficient to explain the entire rise in the mortality.

5. Treatment, which was heroic before 1850, transitional between 1850 and 1860, and expectant and sustaining since 1860, has not, therefore, influenced the mortality rate.

6. Treatment has not influenced the duration of the disease or of its convalescence.

CONCUSSION OF THE SPINE.

In his paper read at the American Medical Association the following conclusions were announced by Dr. H. H. Smith :

1. Concussion of the spine is no longer a matter of doubt, but may sometimes occur as the result of various forms of violence, there being nothing peculiar in the application of the force to the body, as the result of derailment or collision of railroad trains.

2. The pathological changes noted in the molecular structure of the cord as the result of shaking, jarring, or so-called concussion of the cord, when attended by paralytic symptoms, may be due to hemorrhagic effusion, or be shown post-mortem in softening or localized or limited atrophy. In cases due to hemorrhage the symptoms may be improved by judicious treatment, and permanent disability prevented.

3. The possibility of preëxisting neurasthenia, or hysteria, or fraud on the part of a claimant, should be carefully noted in forming a diagnosis in these cases.

4. As the question of permanent disability, justifying exemplary damages, is frequently raised in claims of the kind alluded to, it should be recollected in forming a prognosis that numerous cases are reported of recovery or marked improvement in a few weeks, and one in three years, even after the occurrence of paralysis.

5. No physician should go into court and swear that a plaintiff has had a concussion of the spinal cord or of its nerves, unless he has proved the disturbance of the normal function of the cord, as shown in sensation or motion, or both, and that the symptoms appeared soon after the injury.

FRACTURES OF THE SPINE.

Dandridge, in an able paper read before the surgical section of the American Medical Association, reached the following conclusions as to the treatment of these fractures :

1. In fractures of the cervical vertebræ, there is indicated immediate reduction of any displacement by extension and manipulation under an anæsthetic, followed by continuous extension and immobilization.

2. In all fractures of the lumbar or dorsal spine, involving the bodies or the arches, reduction is effected, with or without the plaster-jacket by the hammock suspension preceded, if there is evident displacement, by extension under an anæsthetic.

3. When symptoms indicating injury of the cord persist without improvement, resection is indicated.

4. Immediate operation would be indicated when there is marked depression of the arches with symptoms of paralysis.

5. Long continuance of the symptoms is not in itself a contra-indication to operation.

6. We have, in suspension, the means of alleviating some of the sequelæ of fracture of the spine.

EXTROVERSION OF THE BLADDER.

Porter gives the following rules, in operations for the relief of this condition :

1. All the general rules of plastic surgery hold in these operations. The flaps must be about one-third larger than the gap to be filled.

2. They must be arranged in such a manner as to furnish to the pedicles an abundant supply of blood.

3. During delays in the operation they should be covered with hot towels wet in an antiseptic solution.

4. They must be handled as little as possible, and rarely with forceps.

5. Any dragging on the pedicle endangers the vitality of the flap.

6. All bleeding must be arrested before the flaps are adjusted in position.

7. Light and gentle compression prevents any oozing between them.

8. The operation completed, they should be kept for many hours under moist, hot, antiseptic dressings.

9. Perfect antisepsis should be maintained throughout.

Dr. Robert T. Morris, of New York, read a paper entitled

WHAT DRESSING SHALL LIE NEXT THE WOUND?

Vaseline or oil spread upon any textile fabric presents the worst type of dressing, because the unguent mingles with the discharges and retards organization ; because the textile fabric entangles new epithelium cells and connective-tissue cells, and because there is nothing in the dressing to prevent fermentation and wound infection. Lint and cotton are even worse than textile fabrics.

The cerates spread upon textile fabrics are one point better, in that new epithelium and connective-tissue cells are not entangled in the mesh.

Balsams spread upon textile fabrics, or upon lint or cotton, are better than vaseline or cerate, because they may limit fermentation.

There are only two perfect types of dressing. The iodoform covering for small wounds represents one of these. Iodoform forms a thin, firm coagulum with lymph, and this is not easily attacked by microorganisms. Beneath this coagulum the processes of repair go on smoothly in small wounds, even when a certain number of microbes are at work, because the iodoform neutralizes the ptomaines.

The other perfect dressing is the one suitable for larger wounds, and it possesses the following properties : First, smoothness, and impenetrability to new epithelium and connective-tissue cells (Lister's protective oiled silk). Second, a bulky mass which is highly absorptive, to draw serum away from the wound, and to make it too dry for microbe food ; and this dressing is charged with antiseptics to destroy microorganisms (bichloride cotton or gauze).

WE regret to announce that Dr. George M. Gould will be prevented by the pressure of private business from continuing his contributions.

Book Reviews.

DIPHTHERIA: its Nature and Treatment. By C. C. BILLINGTON, M.D., and **INTUBATION IN CROUP, and other Acute and Chronic Forms of Stenosis of the Larynx.** By JOSEPH O'DWYER, M.D. Octavo, 326 pages. Price, muslin, \$2.20. New York: William Wood & Co.

The author does not claim to have written an exhaustive treatise on the subject he has chosen, yet he has added a valuable contribution to the bibliography of this grave disease. The etiology of diphtheria, in spite of the attention given, is still in doubt. In fact there seems to be but little certainly known of the disease. Some consider it first to be purely local, and afterwards, through absorption of the septic products, to become constitutional; others, again, consider diphtheria to be constitutional from the first, and to make the pharynx its "site of election."

All so-called membranous croup is held by some to be simply diphtheria of the larynx; whilst others scout such an idea as nonsense.

There are others, again, conservatives, who believe that there is such a disease as membranous croup, but that it is very rare, and that many cases so described are in reality diphtheria. To this latter class belongs our author. He says: "Simple membranous croup is a comparatively rare form of disease. In regions in which diphtheria is endemic or epidemic, the two affections are so likely to be inter-complicated or confounded that the distinction is practically worthless." Dr. Billington ranks himself also among those who believe that diphtheria is primarily a local affection, and cites a number of clinical facts to prove his point.

The article contributed by Dr. O'Dwyer on Intubation in Croup adds much to the interest and value of the book.

The technique of the operation and all the indications for and against it, are fully and plainly set forth.

KIRKE'S HANDBOOK OF PHYSIOLOGY. By W. MORRANT BAKER, F.R.C.S., ETC., ETC., and VINCENT DORMER HARRIS, M.D., ETC. New York: William Wood & Co. Twelfth edition. Revised and rewritten, making a presentable volume of about 750 pages, and with 500 illustrations.

This old friend comes to us with much of the freshness of a new book, having been largely rewritten. The object of the publishers seems to be to make, for a moderate price, a good and reliable assistant for the student during his college days, when time is precious and something is demanded to supplement the regular lectures. The book is of moderate size, and so arranged that the elementary portion is printed from larger type, thus facilitating the making of an expeditious review. It, in fact, has the advantages of a compendium without many of the objectionable features; it encourages and invites the student to drink deeper, and, at all times, tempts him by the proximity and piquancy of the draught.

The wood-cuts, with which the book is supplied liberally, are distinct and well chosen to illustrate the subjects; if not quite as fine as works of art

might be, they answer the essential requirement of illustrating the text. The type and paper are fair.

The book in its opening chapter treats, by successive steps, of the general phenomena of life, beginning with those of protoplasm. Differentiation between plants and animals, always a stumbling block for the beginner, follows. The morphological development and the division of functions are treated of, commencing with the blastoderm and regularly passing to the elementary structures and the various forms of cells composing them, which are described and well illustrated, frequently by means of cuts from standard histologists.

The next portion is devoted to a description of the blood, its corpuscles, its physical and chemical characters, its development and uses. This is succeeded by the consideration of the circulation, and includes the study of the heart, arteries, veins, and capillaries, their distribution and functions. Respiration is very satisfactorily treated, its importance being acknowledged, but food and diet, which might be dwelt upon with great profit, have been allotted only a short and seemingly too brief space, although the matter is well chosen. Digestion, absorption, and secretion occupy about one hundred and twenty pages; in this the teeth, salivary glands, stomach, liver, pancreas, the intestines and their various glands, are described; the physiological functions and the relations of them and the organs to each other are completely and very tersely given. The skin, kidneys, vascular glands, and muscular system are then described in an able epitome.

The nervous system receives the principal attention, as its importance and the recent discoveries warrant, comprising nearly one-third of the book. The different motor centers of the cortex of the brain are described and illustrated with a view to facilitate the diagnosis of brain lesions and to guide in the surgical efforts for their cure, which are bidding for an exalted position in the treatment of many affections heretofore incurable and often frightfully painful. Indeed, the appalling sufferings, so long the reproach of the healing art, at one time embraced under the obscure general title of neuralgia, of late frequently are completely cured as a result of the skilful and thoroughly educated surgeons' abilities to discover the location of abnormal growths or deposits, which was only possible when guided, as they have been, by the science of physiology.

The generative organs are minutely studied, and many of the features of development are explained to the reader in a masterly manner.

A chapter "on the relation of life to other forces" is both interesting and instructive, in that it deals with some similarities of correlation of force or energy in machines and organized bodies. In this the task of persevering in the unfolding of the enigmas of life or vital action is bravely attempted, and although it seems to be acknowledged by the author as elusive, yet he holds to the conclusion that it is a duty to push onward without discouragement, evidently impressed with a belief that some day the problem will be solved.

Finally, an appendix furnishes much of the organic

chemistry that many writers weaken their works by attempting to introduce in the bodies of them, where it seems more likely to discourage the young student than to interest him.

In the method of arrangement of this book appears to lie one of the strongest recommendations for its publication. Indeed, the work may be most justly commended, and college students or busy practitioners will find in it *multum in parvo*. We doubt not that the book will find a ready sale, from the fact that its simplicity will make it popular; being comparatively free from the much involved, prolix and over-conscientious effort to explain physiological phenomena, which embarrass the general student.

T. C. S.

CYCLOPÆDIA OF THE DISEASES OF CHILDREN, MEDICAL AND SURGICAL. Edited by JOHN M. KEATING, M.D. Vol. I. J. B. Lippincott & Company.

The diseases of children are perhaps the most difficult of all human ills to rightly understand and properly characterize. Every new book which really sheds fresh light upon this now special department of medical science is to be encouraged and welcomed. The present work will be issued serially in four large volumes, the first of which has recently appeared. In its scope it is truly cyclopædic, a fact which will tend to diminish its usefulness so far as relates to the needs of the general practitioner, to whom a more concise statement of well-established facts would, for obvious reasons, be preferable. By the so-called specialist in children's diseases, however, the appearance of this work will be hailed with peculiar delight; for the latter, unlike the busy family doctor, seeks to regale himself with the foremost speculations of cotemporary medical literature bearing upon his favorite line of study, and to this end this book promises to provide for him abundantly. And from the hands of the student of pædiatrics this work will doubtless receive unlimited praise. The general practitioner, however, will frequently have occasion to employ this colossal work, referentially. It should not fail, therefore, to find a place in all of our leading American medical libraries.

The method pursued by the editor in selecting authors, many of whom are widely-known specialists, with sole regard to their peculiar fitness to discuss the subjects assigned to them, has its obvious advantages, and this is a pretty good guarantee that the book throughout will contain sound instruction. It is given to but very few, if any, writers, even though they be rarely gifted specialists in this broad domain, to become the satisfactory exponent of a product so comprehensive in all its elements as the book under discussion.

The present volume contains 990 pages. The introductory chapter is contributed by Prof. A. Jacobi, who points out clearly, in a general way, the differences in the behavior of the various organs of the body while the child is passing through the different stages of its development, and that these anatomical and physiological differences greatly affect the course and symptomatology of children's

diseases as well as the frequency of their occurrence. He also calls attention to the important practical fact that certain malformations and maladies occur only in early childhood. But most of the points brought forward in the introductory are more fully presented in the first two articles under Part I, namely, "On the Anatomy of Children," by George McClellan, M.D., and "The Physiology of Infancy," by Angel Money, M.D. In discussing the anatomy of the abdomen, McClellan very properly describes fully the nerve supply, since the symptoms relating to the diseases of childhood can in numerous instances be interpreted only through a knowledge of the position of the nerves. In a work of this sort to devote a special chapter to diagnosis might be considered not entirely relevant, but the advice given on this head is for the most part excellent, particularly on the method of examining sick children. And Dr. Finlayson has also given prominence to a fact of prime importance, namely, that special tendencies to acute diseases are inherited just as certainly as that chronic disorders are transmitted from generation to generation.

Since the subject of the relation of bacteria to disease has come to occupy a foremost position, its presentation in a particular manner by Dr. Shakespeare, a zealous worker in this field of investigation, will be heartily received by the profession.

The popular belief in maternal impressions is fully supported by Dr. Wm. C. Dabney, who gives us some important conclusions, drawn from actual facts, which he subjoins in a large general table. Dr. Barton Cooke Hirst handles "Diseases of the Fœtus" with a masterly hand. There is much practical information contained in the chapter which treats of "The Child at Birth and Immediately Thereafter," contributed by Prof. R. A. F. Penrose.

Prof. Parvin furnishes a lucid statement of the "Injuries of the Newborn," in which he points out the too little known fact that in instrumental deliveries injuries are not only at times inflicted upon the head externally, but also upon the meningeal vessels, causing hemorrhage and death.

A large share of attention is quite befittingly devoted to infant feeding. Space would fail us were we to attempt to examine in detail Dr. Rotch's able exposition of this important theme. We feel constrained, however, to add that the reader will find in the author's division of artificial foods, and his discussion thereon, all that is needful to serve as a reliable guide in the employment of an indispensable class of preparations.

The following subjects, Wet-nurses, Diet after Weaning, Nursing of Sick Children, Nursery Hygiene, Dentition, and Puberty; its Pathology and Hygiene, are all cleverly, though briefly, examined by as many different writers.

Part II is dedicated chiefly to the consideration of fevers and miasmatic diseases, and among the many individual affections treated, and their well-known authors, respectively, are, Enteric Fever, by J. C. Wilson, M.D.; Typhus Fever, by Alexander Collie, M.D.; Relapsing Fever, by R. G. Curtin, M.D.; Cerebro-spinal Fever and Diphtheria, by J. Lewis

Smith, M.D.; Scarlet Fever, by S. Busey, M.D.; Measles, by Dr. Waxham; Rheumatism, by W. B. Cheadle, M.D., F.R.C.P.; Malaria, by T. Forchheimer, M.D.; and Yellow Fever, by John Guiteras, M.D. The majority of the special diseases are treated with a degree of fulness commensurate with their leading practical importance; a few, however, are not, notably, scarlet fever.

It is gratifying to see it recommended in doubtful cases of malaria to examine the blood for plasmodium. In describing the treatment of pertussis, Dr. Dolan does not mention the use of antifebrin, which has a peculiarly favorable influence upon the severity and the frequency of the paroxysms, in careful hands. In his chapter on Vaccination, Dr. W. T. Plant does not advise against the use of humanized virus, but tells us how, in his opinion, the danger from the transmission of disease can be avoided. In short, the truth is, however, that no precautionary measure can insure immunity in every instance, and the only adequate safeguard to society lies in the use of bovine virus. Dr. Wm. Wright Jaggard adds an article of great scientific interest on Joined Twins, and Dr. H. Y. Jayne one of equal merit, on Embryology. Prof. Roberts Bartholow concludes the present volume by a charming discourse upon the General Therapeutics of Children's Diseases, in which he, at the outset, takes occasion to direct attention to the fact that, "Whatever hold homœopathy has acquired, is due, for the most part, to the sugar pellets, tasteless solutions, and other contrivances for rendering the administration of medicines a pleasure rather than a pain." He continues: "Our efforts should be directed to the preparation of efficient remedies that shall be also without disagreeable qualities."

Many of the subjects treated in this volume are further elucidated by means of numerous good illustrations. The publishers, in issuing this work, have given us a creditable example of American book-making.

J. M. A.

Gleanings.

THE PREVENTION OF MIGRAINE.—Dr. Hammer-schlag has never been disappointed in the use of the following combination for preventing sick headache:

R.—Caffein citrat. 1.00 = gr. xv.
Phenacetin 2.00 = 3 ss.
Sacchar. alb. 1.00 = gr. xv.
M.—Ft. pulv. div. in dos. æqual. No. X. Divid. in capsul. amylac.

Sig.—One capsule every two to three hours during the interval between the attacks.—*Allg. Med. Centr. Ztg.*, No. 39.

FROMENTINE.—A French chemist named Beaumetz exhibited at a recent meeting of the Paris Academy of Medicine a new alimentary substance, which he names fromentine. It is obtained from wheat by the aid of special millstones, and is really the embryo of the wheat reduced to flour. It contains three times more nitrogenous substance than meat, and a large proportion of sugar. It is thought that it may advantageously replace powdered meat as a concentrated food. It may be employed for making soups, and even for making biscuits.—*Am. Anal.*

ENURESIS AS A HABIT.—When such is the case successes have been reported by closing the meatus urinarius with collodion at night.

WATER IN THE LUNGS.—Bowles (*London Lancet*) says that contrary to the general belief that water does not enter the lungs of those drowned, on account of closure of the epiglottis, he has found water a number of times in the lungs of both animals and human beings who died by drowning; and therefore holds that the Sylvester method of resuscitation is not to be relied on.

ALCOHOLIC PARALYSIS.—Ross (*London Lancet*), thinks that these three symptoms are generally to be found in a coming case of alcoholic paralysis, often long before any of the graver manifestations, and may thus be of much aid, especially in cases where no history of alcohol drinking is known. The first is numbness of the fingers and toes; second, vasomotor spasm of the extremities, Reynand's local asphyxia, giving rise to deadness and coldness of the fingers and toes; third, severe cramps, most frequent and severe in the muscles of the calf.

DANGER OF GIVING CHLOROFORM BY GAS-LIGHT.—Ball (*The Practitioner*), adds to the cases already reported a number of others showing the disagreeable and even dangerous symptoms that may arise, both to the patient and the bystanders, in using chloroform by gas-light. A strong irritant is produced under such circumstances, which has been found to be carbon oxychloride, or phosgene gas. The symptoms are paroxysms of coughing, a sense of choking and irritation in the throat, giddy feeling, and, after a time, a strangling and burning sensation over the larynx.

PREVENTIVE INOCULATION.—M. Roux, on behalf of M. Pasteur, gave the Croonian lecture on this subject. The lecture is an able *résumé* of Pasteur's work in this particular direction. With regard to inoculating for hydrophobia, M. Roux says that 6870 persons have undergone the treatment at the Paris Institute since July, 1885, and that of this number the mortality has been only 1 per cent., against that of 15 per cent. which usually follows the bites of rabid animals. He considers that the violent attacks which have been made against the practice are without any just foundation.

THE family of Dr. Chas. T. E. Ritter, of No. 188 Mercere Street, New York City, who was found dead in bed, 8 o'clock June 20, discredit the rumor that he committed suicide. The Doctor had suffered heart disease for some time. He attended the dinner at the opening of the Brooklyn Throat Hospital, Wednesday night and it is thought that the unusual excitement brought on an attack of his ailment. Coroner Lindsay thinks that death was due to natural causes.

AN EXTRAORDINARY EXPERIMENT AND ITS RESULTS.—At the Société de Biologie, M. Brown-Séquard made a very curious communication which will admit of very different interpretations. He said that he had been lately making experiments of a very interesting nature. Guided by certain theoretical ideas, he extracted the liquid from the testicles of animals and injected it into other animals, and finally *into himself*. The effect on the animals he was not able to fully understand, but he could give an account of what he himself experienced. As to the immediate effect of the injection he would not say more than that a certain amount of inflammation followed, which, however, never went on to suppuration. After some time he felt himself becoming a new man, constipation from which he suffered for several years disappeared as if by enchantment, urinary troubles which gave him for some time much uneasiness ceased almost immediately, and not only that, but strength returned to his legs, so that he can remain standing for hours together without fatigue. His intellectual powers were also greatly stimulated, and, in fact, he declared that he felt himself at least *thirty years younger*. He discreetly threw out a hint as to the other functions which were revived by these experiments! M. Brown-Séquard concluded by saying, that it might be thought he was dreaming, or suffering under a delusion, but he assured them he was not, and he maintained exactly what he reported. A member mildly suggested that the fever produced by the irritating liquid injected may have produced in a certain sense the phenomena, but he was immediately sat on by the eminent physiologist. Perhaps, with all respect, the well-known words of Governor Felix to St. Paul might be used with more truth towards our learned friend.—*Med. Press.*

DR. L. B. BAKER, a prominent physician of Beebe, Arkansas, was recently married to Miss Mollie Hines, of Newport, Arkansas.

DR. LOUIS FRANK, resident graduate of the Louisville City Hospital has resigned that position and has been succeeded by Dr. Chas. B. Smith, of Millersburg. Dr. Frank and wife start at once for Strasburg, Germany, where the doctor will take a two years' course in medicine.

A meeting of Wyoming county physicians was held in Warsaw, Tuesday afternoon last week. A committee consisting of Drs. Palmer, of Pike, Rae of Portageville, and Lush of Warsaw, were appointed to make arrangements for the meeting to be held at the Cascade House, Portage, in September.

THE members of the Rochester Pathological Society held their annual election of officers at the Genesee Valley Club House, Rochester, New York, Thursday Evening last. Dr. Benjamin Wilson was elected President; Dr. E. T. Dow, Vice-President; Dr. Ogden Bachus, Secretary. Dr. E. W. Mullegan, the retiring president read a paper on Microscopy in Medicine.

THE *Maritime Medical News* gives an interesting chart, covering four generations of a family's history, and beautifully illustrating the heredity of a neurotic taint, and the interchangeability of neuroses.

Descendants of Amos M. No information about parents.

A. M., one of six children, of whom two, A. M. and D. M., had progressive muscular atrophy.

A. M. had eleven children, of whom five had progressive muscular atrophy, and seven either had it or transmitted the disease. These considered *seriatim*:

H. M. had two children; M. E., progressive muscular atrophy, and she had one daughter (fourth generation) blind; and A. M., who died of epilepsy.

A. M., 2, had progressive muscular atrophy, but his family was exempted.

J. M. had a large family, but no information was obtained.

N. T., progressive muscular atrophy, and of her children, two had same disease, one died of epilepsy, one insane, two died suddenly, others healthy.

E. M., family exempted.

S. W., progressive muscular atrophy, had three children, of whom two had same disease, and the third insane. W. W.'s children, numbering four (fourth generation) all suffer from nervous troubles.

E. B., progressive muscular atrophy, but family exempt.

H. T., two children, both with progressive muscular atrophy. Mrs. H. has eight of a family (fourth generation), of whom two are idiotic.

C. H., family exempt.

I. H., family exempt.

D. B., progressive muscular atrophy, had one child with same disease, and she had a child (fourth generation) with it. Of other members: one died young, one of diabetes, seven of phthisis; three are in good health.

Descendants of David M.

D. M., progressive muscular atrophy, had eleven children, of whom three had same disease. Family considered *seriatim*:

R. M., family exempt.

R. C. died of tumor of stomach; family exempt.

R. M. died of dropsy.

J. M. died of liver disease. Nothing known of family.

T. M. died of old age. Nothing known of family.

S. H., progressive muscular atrophy, had seven children, of whom four had same disease.

N. H. has large family, one epileptic.

D. H., progressive muscular atrophy.

H. H., no family.

M. C., progressive muscular atrophy, had three children (fourth generation), of whom two had same disease.

R. S. had one idiotic; rest of family exempt.

J. H., progressive muscular atrophy, had one son with same disease.

W. H., progressive muscular atrophy.

D. M. died of old age. Nothing known of family.

A. M., living. Nothing known of family.

R. M., nothing known of family.

A. S., progressive muscular atrophy, family exempt.

M. W., progressive muscular atrophy; one son with same disease.

Medical News and Miscellany.

DR. MECKLENBURG POLK has a farm on Long Island.

THE sanitary condition of Atlantic City is said to be good.

DR. JOSEPH W. HOWE, of New York, expects to sail for Europe in August.

DR. A. R. BLAIR, one of York's oldest and most respected citizens, is seriously ill.

DR. HERMANN M. BIGGS, of New York, who is in Europe, is expected back in August.

DR. WILLIAM H. THOMPSON, of New York, becomes a Connecticut farmer during the heated term.

THREE men on the bark "Samar," from Tamatave, are reported to have died on the voyage, from beri-beri.

THE American Pharmaceutical Association lately met in San Francisco, with an attendance of 375 delegates.

DR. LEWIS A. SAYRE is still at the Hot Springs, Virginia, where he has been recuperating for several months.

DR. ERNEST B. SANGREE was lately appointed vaccine physician in the third district, *vice* Dr. Williams, deceased.

THE Presbyterian Hospital is in luck; it has lately had \$150,000 given it for the purpose of making certain additions.

DR. FRANCIS M. PERKINS married Miss Franc Arnold Walker, June 19, 1889, in Plymouth Church, Brooklyn, N. Y.

THERE were 400 deaths in Philadelphia for the week ending June 24, against 389 for the corresponding week of last year.

DR. FREDERIC S. DENNIS, of New York, has a cottage at Elberon, Long Branch, where he usually spends his summers.

IF our city street contractors were made to live on some of the little back streets, these by ways would be less odorous than at present.

THE number of inmates in the Philadelphia Almshouse is 2814; in the Philadelphia Hospital, 971, and in the Insane Department, 807.

DR. CHARLES A. DOREMUS has a cottage at Pelham, a fashionable settlement on the north shore of Long Island Sound, near New Rochelle.

DR. AUSTIN FLINT will not take any long vacation away from New York, as he is on duty at Bellevue Hospital during July and August.

THE preliminary Announcement is out of the American Public Health Association, which holds its seventeenth annual meeting at Brooklyn, N. Y., October 22, 23, 24, 25, 1889. Among the desiderata we notice that "all papers must be either printed, type written, or in plain handwriting."

AN epidemic of malignant diphtheria has broken out in Carbondale. In one family four children are lying at death's door, and in another three.

THE \$25,000 that the Legislature did not give for the new hospital, the Hahnemannians intend to try to raise next fall by means of some entertainment.

A LONDON health inspector reported that a number of cases of diphtheria had been caused by cats going from house to house, and thus carrying the virus.

DRS. GEORGE WOOLSEY and C. G. Coakley are lecturers on Anatomy at the University Medical College, New York, but the Chair of Anatomy is not yet filled.

PETER D. KEYSER, A.M., M.D., Professor of Ophthalmology in the Medico-Chirurgical College, has lately been appointed a member of the City Board of Health.

THE Johnstown physicians proper are beginning to object to the various society physicians stationed there, as they say that the latter are treating every one regardless of ability to pay.

DR. A. E. MACDONALD, General Superintendent of the New York City Asylums for the Insane, will give the greater part of his time this summer to the farm for the insane at Islip, L. I.

A WESTERN paper, speaking of a man who carries a bullet in one side of his head to the great detriment of his memory, says that he frequently harnesses one side of a horse and forgets the other.

THEY are now making examinations in England and Germany of the various floor deafeners, with the result of finding that they are perfect mines of bacteria, and manufactories of bad smells.

THE entire extent of Long Island is a favorite resort for New York physicians in summer, and Bay Shore, on the Great South Bay, just inside of Fire Island light, is especially popular with them.

JOHN V. SHOEMAKER, A.M., M.D., and John Aulde, M.D., are engaged on a "Treatise on Materia Medica, Pharmacology, and Therapeutics," which they expect to have out in the early autumn.

SURGEON PARRY, of the East Indian Medical Department, says that he saw the jet-black hair of a rebel Sepoy turn gray in an hour while he was under examination and half mad with fear.—*Times*.

DR. JOHN W. DE WITT, of St. George's and Drs. Howard Ogle and Peter Cooper, of Wilmington, Del., have been appointed a Board of Examining Surgeons for pension applicants of the Wilmington district.

A DISPATCH from Ottawa, Ont., says that at Cape Breton, last week, Dr. Smith discovered four cases of leprosy. A case was reported to him in 1885, and he is severely censured by the authorities for having allowed the disease to go on without investigation until within a few days. The four victims have been removed to Tracadie Lazaretto, where there are already nineteen patients.—*Ledger*.

THE water-shed from which New York's Croton water is collected covers 361 square miles; and it is computed that 18,500 cows, pigs, horses, and sheep live on that shed. The relation between these two facts is obvious.

ACCORDING to the figures, proportionately less die in New York tenement houses than in the more desirable localities; but in this case we think the figures have gone back on the well-worn adage with respect to their truthfulness.

THE Philadelphia Board of Health has received a complaint of the sanitary condition of the public school building at Third and Lombard Streets. It is said that three of the teachers and a number of pupils are now ill.

DR. RUDOLPH A. WITTHAUS, Professor of Chemistry and Physics at the University Medical College, is now lecturing in the Medical Department of the University of Vermont at Burlington. He returns to New York on July 20.

THE Pennsylvania Railroad has just issued stringent rules with regard to the sanitary condition of all their property, rolling stock, and the like. Everything must be kept scrupulously clean, and disinfected when necessary.

THE entire family of Thomas Dunn, of Smith Street, Belleville, N. J., has died within ten days. On Friday, the 14th ult., one of his four children died of diphtheria, another died the following day, another last Friday, and the fourth yesterday.

ACCORDING to a daily paper, Judge Pratt, of Brooklyn, awarded \$12,000 damages to a woman as a salve for her wounded feelings (it says health, but that couldn't be), hurt by taking five grains of calomel from a steamship's surgeon instead of quinine.

THE graduates from the University Medical College, who go to Bellevue Hospital this year, are H. L. Constable, of Ohio, W. E. Chau, of New Jersey, M. M. Rodriguez, of Central America, G. C. Pope, of New York, and C. H. Towler, of New York.

DR. CHARLES INSLEE PARDEE, Dean of the University Medical College, New York, splices his tarry toplights with great facility, now that he has developed into a yachtsman. Dr. Pardee is a hard worker and seldom leaves his desk at the college for more than a day or two at a time in summer.

IT looks as though the Pneumatic Cabinet, after a brief but troubled struggle with a cold world, had lain down for a prolonged rest.

"Whines of Coca!" That is what the besieged doctor calls them, as he listens to the plaintive appeals of rival manufacturers for his favorable consideration.

ANOTHER instance is reported of a child who found its mother's pill-box, loaded with one hundred pellets of quinine and strychnine, and straightway ate thirty or forty of them under a false impression. The Coroner held the usual inquest.

We wonder when mothers will take at least as much care to keep poison out of their childrens' way as they do with candy.

DR. GEORGE PATTEN BIGGS and Dr. Louis Raush, both of New York, who graduated at Bellevue this spring, were among the successful candidates for appointment in Bellevue Hospital and enter its service next October. The other successful candidates were Dr. Austin Flint, Jr., and Dr. George David Stewart, who began work at the hospital in April.

THE newly constituted Board of Health of Lancaster, Pa., consisting of William A. Morton, Dr. R. M. Bolenius, Dr. D. R. McCormick, M. F. Steigerwalt, and S. H. Zahm, organized by electing William A. Morton President, Jacob Halbach, Secretary, and Dr. Walter Boardman, Health Commissioner.

—*Daily Paper.*

DR. THOMAS M. MARKOE, who has been chosen Vice-President of the College of Physicians and Surgeons, has been a medical professor in New York for nearly half a century, and is now seventy years of age. As a lecturer he has always been regarded with the highest favor by the students of this college, which is now the best equipped institution of its kind in the United States.—*Times.*

FOUR sons of members of the Faculty of the Bellevue Hospital Medical College are assistants to chairs in that institution; viz., Dr. Charles A. Doremus, Professor Adjunct to the Chair of Chemistry and Toxicology; Dr. Reginald H. Sayre, Assistant to the Chair of Surgery; Dr. Lewis Hall Sayre, Assistant to the Orthopædic Surgeon, and Dr. Austin Flint, Jr., Assistant to the Chair of Physiology.

THE New York Post-Graduate School has acquired title to the property which it occupies, valued at \$90,000. Dr. Lindsay, of the Post-Graduate, has made a photograph of the professors of this institution, having first taken separate pictures and then photographed the heads together upon a simple plate. The pictures are better likenesses, and are sharper in their outlines than are generally seen in such a group.

DR. A. W. WILKINSON will be well and kindly remembered as the assistant of Dr. Doremus for a long time at Bellevue Hospital Medical College, and the College of the City of New York. Dr. Wilkinson gave up this position about twelve years ago and became the chemist of the Mutual Gas Company. When that Company, with the others in New York, formed the "Consolidated," Dr. Wilkinson's services were retained, and I understand that he was paid \$250,000 for a single invention which he sold that able business organization.

THERE is an opinion that those in control of the Training School for Female Nurses on East Twenty-sixth Street, New York, nearly opposite the entrance to Bellevue Hospital, are looking with longing eyes at the new building of the Mills Training School for Male Nurses. The male nurses are getting their training from the female nurses, and it is said that the hospital doctors do not bestow as much friendly attention upon the members of the Training School for Men as they do upon the young women from over the way.

THE PHARMACY SECTION, AMERICAN MEDICAL ASSOCIATION.

In the exhibit room, back of the Ocean House, were to be found specimens of the skill of nearly all our leading manufacturers. There was evidently an overstock of samples, owing to the small attendance of physicians. Among the preparations which were offered to the visitors were the following:

Maltine Manufacturing Co., 54 Warren Street, New York.

Maltine, plain and variously medicated.

J. P. Bush & Co., 2 Barclay Street, New York.

Bovinine.

Thomas Leeming & Sons, 18 College Place, New York.

Nestle's milk food and condensed milk.

Provident Chemical Co., St. Louis, Mo.

Crystalline phosphate.

Reed & Carnrick, 447 Greenwich Street, New York.

Beef peptonoids, powdered and liquid.

Soluble foods.

Lacto-preparata.

Pancro-bilin, pills and liquid.

Bromo-pyrine.

Lambert Pharmacal Co., St. Louis, Mo.

Lithiated Hydrangea.

Listerine.

W. H. Schieffelin & Co., 178 William Street, New York.

Pills of salol.

" phenacetine.

New York and Chicago Chemical Co., 98 Maiden Lane, New York.

Golden scale pepsin.

Ford's pepsin.

London essence of beef.

Carl L. Jensen Co., 100 Maiden Lane, N. Y.

Jensen's crystal pepsin.

H. Bernd & Co., 2631 Chestnut Street, St. Louis, Mo.

Sample leaves of physicians' registers.

Tarrant & Co., 280 Greenwich Street, New York.

Genuine imported Hoff's malt extract.

Seltzer aperient.

Henry B. Platt, 36 Platt Street, New York.

Platt's Chlorides.

Malted Milk Co., Racine, Wis.

Malted milk.

Doliber-Goodale Co.

Mellin's food, etc.

New York Pharmaceutical Co., New Bedford, Mass.

Hayden's viburnum comp.

John Wyeth & Bro., Philadelphia.

Troches of comp. licorice powder.

" Jamaica ginger.

" Jackson's pectoral.

Hypodermic tablets of morphine.

Soda-mint.

Compressed pills, antibilious.

" " quinine.

" " laxative.

" " morphine and atropine.

" " calomel.

Peptonic pills.

Extract of malt.

Fluid extract buchu.

" " valerian.

" " digitalis.

" " alterative.

C. S. Baker & Co., Chicago, Ill.

Rose's peptonized beef.

" " " and cod-liver oil.

Nitrogenized iron, alone and compounded variously.

Chesebrough Manufacturing Co., New York.

Vaseline in all forms, pomade, cold cream, etc.

The Upjohn Co., Kalamazoo, Mich.

Pills of creasote.

" quinine.

" for migraine.

Beeman Chemical Co., Cleveland, Ohio.

Pure pepsin.

Caswell, Massey & Co., New York.

Quinine chocolates.

Hazard, Hazard & Co., New York.

Elixirs.

Hypodermic tablets.

Rigaud & Chapoteaut, Paris, France.

Peptone wine.

" powder.

Capsules of dialysed pepsin.

" morrhuel.

" santal-midy.

" creasote.

" valerianic ether.

Keasbey & Mattison.

Bromo-caffeine.

Johnson & Johnson.

Plasters, lint, cotton, gauze, ligatures, and surgeons' supplies, too numerous to mention.

The Rudisch Co., Greenwich Street, New York.

Rudisch's sarco-peptones.

Armour & Co., Chicago, Ill.

Extract of beef, liquid and solid.

Liebig Co.

Extract of beef.

Wm. R. Warner & Co.

Miscellaneous preparations.

Hance Bros. & White.

Miscellaneous preparations.

Seabury & Johnson.

Surgeons' appliances.

Chidsey & Partridge, Boston.

Surgeons' appliances.

Dr. Daggett, Buffalo, N. Y.

New and improved gynæcological table.

Waite & Bartlett, New York.

Batteries.

Galvano-faradic Co., New York.

Batteries.

Morris Earle & Co.

Microscopes.

Murdock Co.

Liquid food and suppositories.

Eisner & Mendelsobn.

Hoff's malt extract.

Carlsbad water and salt.

D. Appleton & Co., New York.

Books, journals, etc.

Lea Bros., Philadelphia.

Books, journals, etc.

F. A. Davis & Co., Philadelphia.

Books, journals, etc.

Mrs. E. D. Staples, West New Brighton, Staten Island, N. Y.

Invalid cot.

C. H. Phillips Co., New York.

Cocoa and elegant pharmaceuticals.

McKerson & Robbins, New York.

Pills and preparations.

And last, but by no means least, THE TIMES AND REGISTER, the only medical journal which had the enterprise to go into the exhibit, and pay for space and have an agent to attend to its interests. Out of 2000 copies sent to the meeting only about 200 were brought back, so that each member present must have carried away at least two copies. The other journals present appeared in their legitimate place, as side issues to the publishing houses. The New York *Medical Record* excited considerable amusement, because a card in the hotel office stated that a copy of the *Record* could be found in the reading room, which was to be returned after it was perused. This was taken to be Wood's contribution to the meeting, but, in fact, the card had occupied its place for several years, similar ones being posted in all the summer hotels.

While the display made by the manufacturers was not so extensive as usual, it was unusually attractive, nearly all the largest firms being represented.

The exhibit of the Maltine Company, occupying, as it did, one of the prominent locations in the building, attracted universal attention. The exhibit was constantly surrounded by inquiring physicians, and, judging from the number of samples presented, maltine was well advertised in this *legitimate* way.

In direct contrast to the vari-colored displays of bunting and banners appeared the exhibit of the Swiss house of Henri Nestlé, represented by Thomas Leeming & Co. Situated near the door on the west side, they presented a handsome rosewood frame, modestly backed with black velvet, which contained thirty-three gold medals, the awards for many world's expositions, which, by its striking, yet conservative, appearance attracted unusual attention. Physicians wishing a reliable diet for infants, and a pure milk for their table, did not neglect to procure packages of both Nestlé's food and Nestlé's Swiss condensed milk.

One of the handsomest exhibits was that of Reed & Carnrick, who also presented Mr. Cracknell as a sample of what their food can do.

The Jensen, Golden Scale, and Ford Pepsins were represented by Messrs. Ford and Manwaring, whose tests gave the rather singular results that half a grain of pepsin digested more albumen than a grain of the same pepsin. This was due to the larger amount of water used in the first case.

Doliber-Goodale Co. had a large picture of a baby, which seemed to attract the ladies as well as their husbands.

For a firm exhibiting but one article, Platt's stand displayed unusual good taste.

There were scarcely any surgical instruments on exhibition, the owners probably dreading the Newport fogs.

The sable hue predominating at Lambert's exhibit was doubtless due to the lamented death of Mr. Lambert, who was immensely popular with Association physicians.

Army, Navy & Marine Hospital Service.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from June 23, 1889, to June 29, 1889.

FORWOOD, WILLIAM H., Major and Surgeon. The extension of leave of absence on Surgeon's certificate of disability, by direction of the Secretary of War, granted in S. O. 118, May 22, 1889, from this office, is further extended four months. Par. 14, S. O. 142, A. G. O., Washington, June 20, 1889.

CARSON, J. K., Major and Surgeon. Granted leave of absence for one month, with permission to apply for an extension of one month. Par. 2, S. O. 65, Headquarters Department of the Columbia.

HOFF, JOHN VAN R., Captain and Assistant-Surgeon. Is relieved from duty at Fort Reno, Ind. Ty., and ordered to Fort Riley, Kan. Par. 6, S. O. 145, A. G. O., Washington, D. C., June 24, 1889.

BACHE, DALLAS, Major and Surgeon. Is relieved from duty at Fort Riley, Kan., and ordered to report to commanding general, Department of the Platte, for duty as Medical Director of that department. Par. 6, S. O. 145, A. G. O., Washington, D. C., June 24, 1889.

WOODRUFF EZRA, Major and Surgeon. Is relieved from temporary duty at Fort Monroe, Va., by direction of the Secretary of War, and will report in person to the commanding officer at Fort Hamilton, N. Y., for duty at that station. Par. 5, S. O. 146, A. G. O., June 25, 1889.

FISHER, WALTER W. R., Captain and Assistant-Surgeon. The extension of leave of absence granted, by direction of the Secretary of War, in S. O. 41, June 12, 1889, Division of the Pacific, is still further extended fifteen days. Par. 8, S. O. 146, A. G. O., Washington, June 25, 1889.

FISHER, WALTER W. R., Captain and Assistant-Surgeon. The leave of absence granted for one month, by S. O. 30, c. s., Department of California, and extended fifteen days by par. 3, S. O. 37, c. s., from these headquarters, is further extended fifteen days. Par. 1, S. O. 41, Headquarters, Division of the Pacific, San Francisco, Cal., June 12, 1889.

HARRIS, HENRY S. T., First Lieutenant and Assistant-Surgeon. Is granted leave of absence for two months. Par. 13, S. O. 140, A. G. O., June 18, 1889.

By direction of the Acting Secretary of War the following changes are ordered:

TEN EYCK, BENJ. L., First Lieutenant and Assistant-Surgeon (recently appointed). Ordered to Fort Leavenworth, Kan.

GARDINER, JNO. DE B. W., Captain and Assistant-Surgeon. Relieved from duty at Fort Leavenworth, Kan., and ordered to Fort Reno, Ind. Ty.

WALES, P. G., First Lieutenant and Assistant-Surgeon. Par. 3, S. O. 132, June 8, 1889, A. G. O., is so amended as to direct you to report to Fort Huachuca, Ariz., for duty in place of Presidio of San Francisco, Cal.

WYETH, M. C., Captain and Assistant-Surgeon. Relieved from duty at Fort Huachuca, Ariz., and ordered to Fort McDowell, Ariz.

WOOD, LEONARD, First Lieutenant and Assistant-Surgeon. Relieved from duty at Fort McDowell, Ariz., and ordered to Post of San Francisco, Cal. Par. 2, S. O. 138, A. G. O., June 15, 1889.

TEN EYCK, BENJAMIN L., First Lieutenant and Assistant-Surgeon (recently appointed). Will proceed from New York City to Fort Leavenworth, Kan., by direction of the Acting Secretary of War, and report for duty to the commanding officer of that post. Par. 2, S. O. 138, A. G. O., Washington, D. C., June 15, 1889.

Changes in the Medical Corps of the U. S. Navy for the week ending June 29, 1889.

SIEGFRIED, C. A., Surgeon. Detached from the U. S. S. "Quinnebaug," and wait orders.

CURTIS, L. W., Passed Assistant-Surgeon. Detached from the U. S. S. "Quinnebaug," and wait orders.

SMITH, GEO. T., Assistant-Surgeon. Ordered to the Army and Navy Hospital, Hot Springs, Ark.

The Ins and Outs of a Dilemma.

THE "INS" of the Infant Food Dilemma are the parties who are at present trying to imitate

Nestlé's Milk Food for Infants.

The "OUTS" are the clear-headed and well-read practitioners, who have used Nestlé's Food for many years, and know that when Cholera Infantum begins its savage onslaught on infant life in our large cities Nestlé's Food is alone to be prescribed.

These men are in NO DILEMMA; they prescribe Nestlé's Food from June to September. As the present summer will probably be a very hot one, make a note of above. Samples sent on application to

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PRICE, \$25.00 NET.

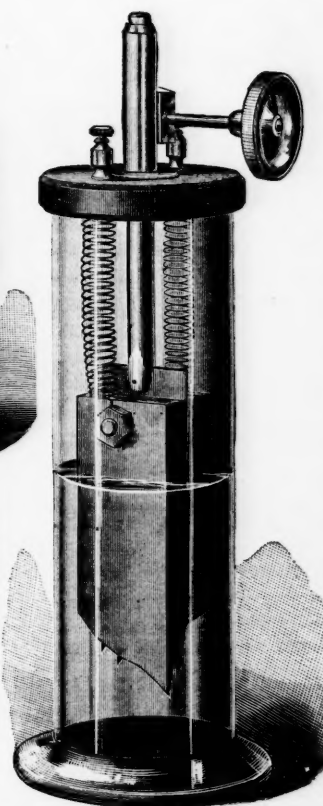


IMPROVED LAW BATTERY. NEAT—CLEAN—HANDSOME.

Efficiency High. Always furnishing a full and reliable current, but requiring no attention whatever in from two to three years, and then only for renewal of Zincs and Sal-Ammoniac consumed in the generation of current. With this exception (costing less than 10 cents per cell). All parts of this Battery are guaranteed to be everlasting, unless the glass be broken by carelessness.

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Notes and Items.

SHE—It may be I have yellow fever, Henry; I think we had better send for Dr. Pillsbury. He—Why, my love I wouldn't send for him. You know he is color-blind.—*Life*.

"WHAT becomes of all the old moons, papa?" asked an enquiring child.

"The old moons, my son?" answered the parent.

"Why, they die of newmonia, to be sure."

THE wife of the Archduke Charles Theodore, of Austria, who has been assisting her husband in different ways since he became a medical practitioner, has determined, so it is reported, to pass the examination which will place her also on the list of qualified physicians.—*Ledger*, June 25, 1889.

WHEN is a ship in love?

when she is waiting to be manned, wants a mate, is struck by a swell, is regarded by a carpenter, is of great sighs, runs down for a smack, is after a consort, is attached to a buoy, is tender to a man of war, and hugs a little cove on shore.

GEORGE: "Jack, what is it that has the largest circulation in the world?"

Jack: "Beecham's Pills, I should say."

George: "No."

Jack: "I'll give it up then."

George: "It is the human blood to be sure."

HARD though it may be to believe, the following are taken from a paper called England, and are the three prize "jokes" of a certain competition. There is a whole page given that took no prize. The best joke we think, is that made by the Editor, when he says, "all letters are to be addressed to the editor and to have the word "joke" clearly written outside the envelope!"

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He passes through his train when going at the rate of fifty miles an hour; he collects and punches tickets with the suavity of one proud of his position. The car jolts, hitches, sways, and he retains his balance without the least awkwardness.

At stations he alights with agility, watches his passengers and gives signals, boards his train and walks the passage-way with the steadiness of one possessing his natural legs.

Day after day for three years he has performed this round of duty and not a soul has had occasion to suspect that he operates on a pair of artificial legs with rubber feet, and only those to whom he voluntarily reveals his condition ever know of his dependence on artificial extremities. His movements are graceful, his appearance is natural, his step is firm and elastic, and his power is complete.

All this is made possible by the virtues of rubber, which largely compose the feet; the old methods of artificial limbs, with wooden feet and mechanical joints, would render this man unsafe, tottish, unsteady and unfit for a position that requires sound footing. The engraving represents Mr. Wade operating on his artificials in his chosen profession.

Conductors, engineers, firemen, brakemen, and men of all trades, who have met with the loss of either extremities, have been restored and enabled to resume their labors by the use of artificial limbs with rubber hands and feet.

Subjects can remain at home and have artificials made, with fit guaranteed. One half the legs

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A treatise of 400 pages, with nearly 200 illustrations and 1000 testimonials sent to those needing legs or arms, who will give a description of their case. The same will be sent to physicians, surgeons and railroad officials, *free of charge*.

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"The book as a whole is the most complete résumé of all the facts of physiology in the language. Less philosophical in plan and execution than the 'Textbook of Physiology' of Michael Foster; it is much richer in detail and it has the advantage of presenting the main facts in histology which it is important for the student to know, and has at the close of each subject a section dealing with its medical aspect. . . . Thus in the single subject of the blood, the following points are noticed which might be read with benefit by every clinical clerk and house physician: the clinical method of determining the specific gravity of the blood and of determining its corpuscular richness; the influence of hemorrhages, of menstruation, and of fevers on the number of the corpuscles; the condition of the blood in chlorosis and in pernicious anæmia; the effects of poisoning with coal gas and carbonic acid gas; the mode of performing transfusion, and a consideration of polyæmia (should it not be polyhæmia) and its forms of mellehæmia and lipæmia, and lastly of anæmia. Considerable additions have been made, too numerous to mention, in the form of illustrations and short sentences and paragraphs, in the accounts of the different systems of organs."—*The Lancet*, January 28, 1889.

This work is *par excellence* a book for the physician, it not only offers a ready means for refreshing his memory on the theoretical aspects of medicine but he can pass backward from the examination of pathological phenomena to the normal processes in this way finds new lights for the application and treatment of disease.

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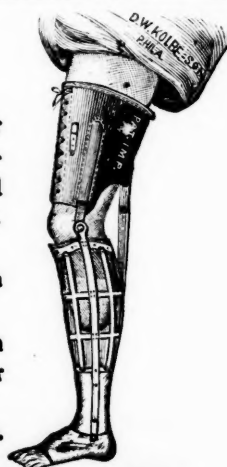
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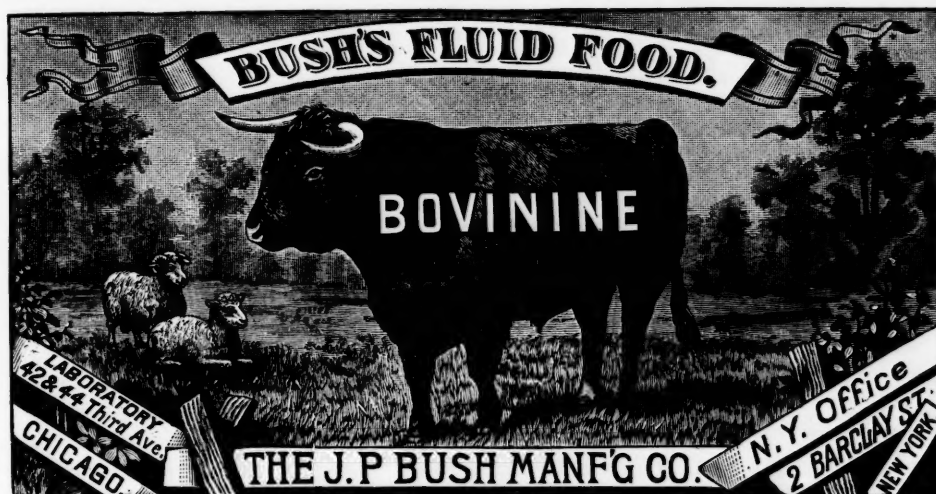
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FROM AN ESSAY READ BEFORE THE AMERICAN MEDICAL ASSOCIATION AT WASHINGTON, D. C., MAY 6th, 1884,

By B. N. TOWLE, M.D., OF BOSTON.

"Nervous debility and neuralgia are often the results of nerve starvation. They are now, more than ever, the dread of every intelligent physician, and the terror of all business men. The weary hours of pain, and the sleepless nights of those suffering from nervous diseases, are but the beseechings of an exhausted nerve for food. Hungry and starved, they make their wants known by the pain they set up as their only agonizing cry; and no medication will give permanent relief until the hunger is satisfied.

Our research, then, must be to find a more easily digested and assimilated food.

Observation seems to sanction the fact that vegetable food elements are more readily assimilated by persons of feeble digestion than are the animal food elements, and especially when they have undergone the digestive process in the stomachs of healthy cattle. The juices of these animals, when healthy and fat, *must* contain all the food elements in a state of solution most perfect, and freed from all insoluble portions, and hence in a form more easily assimilated than any other known food.

I have used Raw Food Extracts for more than eight years, in a large number and variety of cases, and in no case of malnutrition has it failed to give relief.

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Raw Food is equally adapted to lingering acute diseases. I have used it in the troublesome sequelæ of scarlatina, where there was exhaustion from abscesses in the vicinity of the carotid and submaxillary glands; and in protracted convalescence from typhoid fever, with marked advantage. The cases that I especially value it in are laryngeal consumption and nervous exhaustion, in which cases there is always more or less derangement of the digestive tract, such as pain in the stomach, constipation, eructation of gases, distress after taking food, etc. Raw Food should be taken with each meal, the patients taking such other food as they can readily digest, in quantities suited to the individual case.

It adds much to the nutrition of the patient, overcomes the constipation, subdues the nervousness by increasing the strength, and is just the amount added which is required to secure success."

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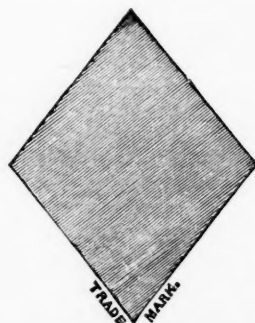
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